

**Appendix B:**  
**Biological Resources Assessment and Western Riverside County Multiple  
Species Habitat Conservation Plan Consistency Analysis**

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## Biological Resources Assessment and Western Riverside County Multiple Species Habitat Conservation Plan Consistency Analysis Palmyrita Avenue Warehouse Project City of Riverside, California

APNs: 247-170-030 and -039

Project Applicant:

**Dedeaux Properties**

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**City of Riverside**

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Date: October 21, 2022  
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## SECTION 1: INTRODUCTION

This Biological Resources Assessment (BRA) and Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Consistency Analysis was prepared by FirstCarbon Solutions (FCS) to support the proposed Palmyrita Avenue Warehouse Project (proposed project) in the City of Riverside, in Riverside County, California. The purpose of this document is to (1) characterize existing and potentially occurring biological resources on the project site and adjacent areas; (2) summarize relevant local, State, and federal regulations; (3) identify and analyze requirements of the MSHCP and determine project consistency with its goals, objectives, and requirements; (4) identify any biological constraints to development of the proposed project; (5) analyze potential project-related impacts on regulated biological resources; and (6) recommend appropriate measures to mitigate potential impacts on biological resources to less than significant levels.

### 1.1 - Project Location and Setting

The proposed project is located in the City of Riverside, in Riverside County, California (Exhibit 1). The approximately 13.60-acre project site is located at 1151 Palmyrita Avenue, which is situated on the north side of Palmyrita Avenue and east of Iowa Avenue, corresponding to Assessor's Parcel Numbers (APNs) 247-170-030 and -039 (Exhibit 2). The site is located within the *San Bernadino South, California* United States Geological Survey (USGS) 7.5-minute Topographic Quadrangle Map.

#### 1.1.1 - General Setting

The proposed project is located approximately 0.5 mile east of Interstate 215 (I-215) in an area of primarily industrial warehouse development, but also commercial development. The project site is bounded to the east by railroad tracks; Palmyrita Avenue to the south; Iowa Avenue to the west; and railroad tracks, large warehouse, and a vacant lot to the north. The project site is currently used for a small-scale manufacturing facility occupied by BarretteWood USA and Barrette Outdoor Living in an existing warehouse building on the west side of the project site. Two areas of grasslands are located on the western and eastern portions of the project site. The central and eastern portions of the project site consist of paved parking. An inactive railroad spur diagonally transects the eastern side of the project site. Two additional freight rail lines transect the northern and eastern perimeters of the project site. Associated landscaping is located along the southern border of the project site adjacent to Palmyrita Avenue.

### 1.2 - Project Description

The proposed project involves the construction of two new warehouse buildings (Building 1 and Building 2) under two scenarios: a 100 percent warehousing scenario (Scenario 1; Exhibit 3a), and a 75 percent warehousing and 25 percent manufacturing scenario (Scenario 2; Exhibit 3b). This BRA and MSHCP Consistency Analysis analyzes construction of the warehouse buildings under both scenarios.

### 1.2.1 - Scenario 1

Under Scenario 1, Building 1 would total 139,667 square feet, and consist of a 132,167 -square-foot warehouse, 4,000-square-foot first floor office, and 3,500-square-foot second floor office(Exhibit 3a). Building 1 would include 125 standard parking stalls, four Americans with Disabilities Act (ADA) standard stalls, two ADA van stalls, one electric vehicle (EV) ADA standard stall, one EV ADA van stall, 16 EV standard stalls, three Clean Air/Vanpool/EV stalls, and 10 parallel parking stalls, for a total of 162 parking stalls.

Building 2 would total 126,091 square feet, and consist of a 116,691 -square-foot warehouse, 5,000-square-foot first floor office, and 4,400-square-foot second floor office. Building 2 would include 126 standard parking stalls, four ADA standard stalls, two ADA van stalls, one EV ADA standard stall, one EV ADA van stall, 16 EV standard stalls, and five Clean Air/Vanpool/EV stalls, for a total of 155 stalls. The square footage of both buildings would total 265,758 square feet, with combined parking of 317 parking stalls. Scenario 1 would include 15 trailer parking stalls.

### 1.2.2 - Scenario 2

Under Scenario 2, Building 1 would total 122,315 square feet, and consist of an 88,736-square-foot warehouse with 30,579 square feet of manufacturing uses and a 3,000-square-foot first floor office(Exhibit 3b). Building 1 would include 168 standard parking stalls, four ADA, two ADA van stalls, one EV ADA standard stall, one EV ADA van stall, 16 EV standard stalls, and three Clean Air/Vanpool/EV stalls, for a total of 195 stalls.

Building 2 would total 122,127 square feet and consist of an 88,595-square-foot warehouse with 30,532 square feet of manufacturing uses and a 3,000-square-foot first floor office. Building 2 would include 159 standard parking stalls, four ADA, two ADA van stalls, one EV ADA standard stall, one EV ADA van stall, 16 EV standard stalls, and five Clean Air/Vanpool/EV stalls, for a total of 188 stalls. The square footage of both buildings would total 244,442 square feet, with combined parking of 383 parking stalls.

## Circulation

Access to the site would be provided via two driveways, one 40-foot driveway and one 30-foot driveway along Palmyrita Avenue, and one 35-foot driveway along Iowa Avenue.

The main freight truck entrance/exit to the proposed warehouse would be from Palmyrita Avenue; the main passenger vehicle entrance would be from Iowa Avenue. It is conservatively assumed the building would operate 24 hours a day, 7 days per week, with the exception of some holidays. The proposed project is anticipated to employ no more than 236 employees. The proposed project would include roadway and frontage improvements along Palmyrita Avenue and Iowa Avenue, as well as the construction of a raised median along Iowa Avenue. Improvements to Palmyrita Avenue and Iowa Avenue would total approximately 0.56 acre.

## Water Quality Management Plan

The proposed project would include two Low Impact Development Best Management Practice (LID BMP), generally one each for Building 1 and Building 2, along with CDS clarifiers for pre-treatment. Each bioretention/biotreatment system would be situated west of each building and would capture and treat runoff from the project site.

The proposed project would also implement source control BMPs to mitigate potential runoff pollutants from landscaping/outdoor pesticide use, refuse areas, condensate drain lines, and plazas, sidewalks, loading docks and parking lots. Proposed source control BMPs include permanent structural BMPs such as implementing landscaping which maximizes groundcover and promotes infiltration, minimizes use of fertilizers and utilizes plants that are tolerant of saturated soil conditions. Refuse areas will be maintained and emptied by a qualified contracted waste management company, or the City. Equipment condensate lines would drain to the sanitary sewer. Operational source control BMPs include the proper disposal of green waste from landscaping maintenance and the provision of Pest Management Information, regular inspection and maintenance of refuse receptacles, and regular sweeping of plazas, sidewalks, and parking lots to prevent debris from entering the storm drain system.

## Landscaping

The proposed project would include 84,581 square feet of landscaping under Scenario 1 and 104,694 square feet of landscaping under Scenario 2. Landscaped areas would occur around the perimeter of the site and throughout the parking areas. Landscaping would consist of a variety of trees, shrubs, and groundcover, including Blue Palo Verde, Desert Willow, Chitalpa, Canary Island Pine, Chinese Pistache, Coast Live Oak, African Sumac, Brisbane Box, street trees, Pineapple Guava, Dwarf Bottle Brush, Silverleaf cassia, Dwarf Dianella, Dianella, Fortnight Lily, Texas Privet, Rosemary, Autumn Sage, Mexican Sage, Coast Rosemary, Dwarf Coast Rosemary, Blue Flame Agave, Blue Glow Agave, Coral Aloe, Red Yucca, Dwarf Acacia, Dwarf Coyote Bush, Prostrate Natal Plum, and Prostrate Rosemary. Landscaping for the proposed project would be designed in accordance with the State mandated Assembly Bill 1881 Water Efficient Landscape Ordinance and the City of Riverside Municipal Code Chapter 19.570 – Water Efficient Landscaping and Irrigation.<sup>1,2</sup>

## Building Elevations and Design

The maximum building height of the proposed buildings would be 42 feet for Scenario 1 and 41 feet for Scenario 2. Buildings would be composed of tilt-up concrete material, with blue glass, metal cladding, clear anodized mullions, and include muted earth tones such as bronze, white, gray, and beige. The design of the proposed project would be consistent with the Riverside Citywide Design

<sup>1</sup> California Department of Water Resources. 2023. Model Water Efficiency Landscape Ordinance. Website: <https://water.ca.gov/Programs/Water-Use-And-Efficiency/Urban-Water-Use-Efficiency/Model-Water-Efficient-Landscape-Ordinance>. Accessed January 18, 2023.

<sup>2</sup> City of Riverside. 2022. City of Riverside Code of Ordinances, Chapter 19.570 Water Efficient Landscaping and Irrigation.

Guidelines<sup>3</sup> and Good Neighbor Guidelines for Industrial Facilities.<sup>4</sup> Rooftop mechanical units, including heating, ventilation, and air conditioning (HVAC) systems, would be screened away from public view from adjacent streets.

### **Walls/Fences**

The proposed project would include a retaining wall at the southwest, northwest, and southeast portions of the site, as well as within some portions of the site. This retaining wall would be 3-foot high when visible from the public right-of-way and 6-foot high when not visible from the public right-of-way. An 8-foot high tubular steel fence is proposed along the northern portion of the site, which would screen the project from the existing railroad tracks adjacent to the site. A 14-foot high tilt up concrete screen wall is proposed at the northeast corner of the site, along with an 8-foot high tilt up concrete screen wall to the east, adjacent to the railroad tracks that abut the site to the east. In addition to the 8-foot high concrete screen wall, 14-foot high landscaping would further screen the site from the adjacent railroad.

8-foot high metal gates would also be located within the site to provide controlled access to various areas of the project.

### **Outdoor Storage of Trucks and Screening**

As mentioned above, a mix of fencing, walls, and landscaping would be located around the site perimeter to screen the proposed project from the adjacent roadways and railroad.

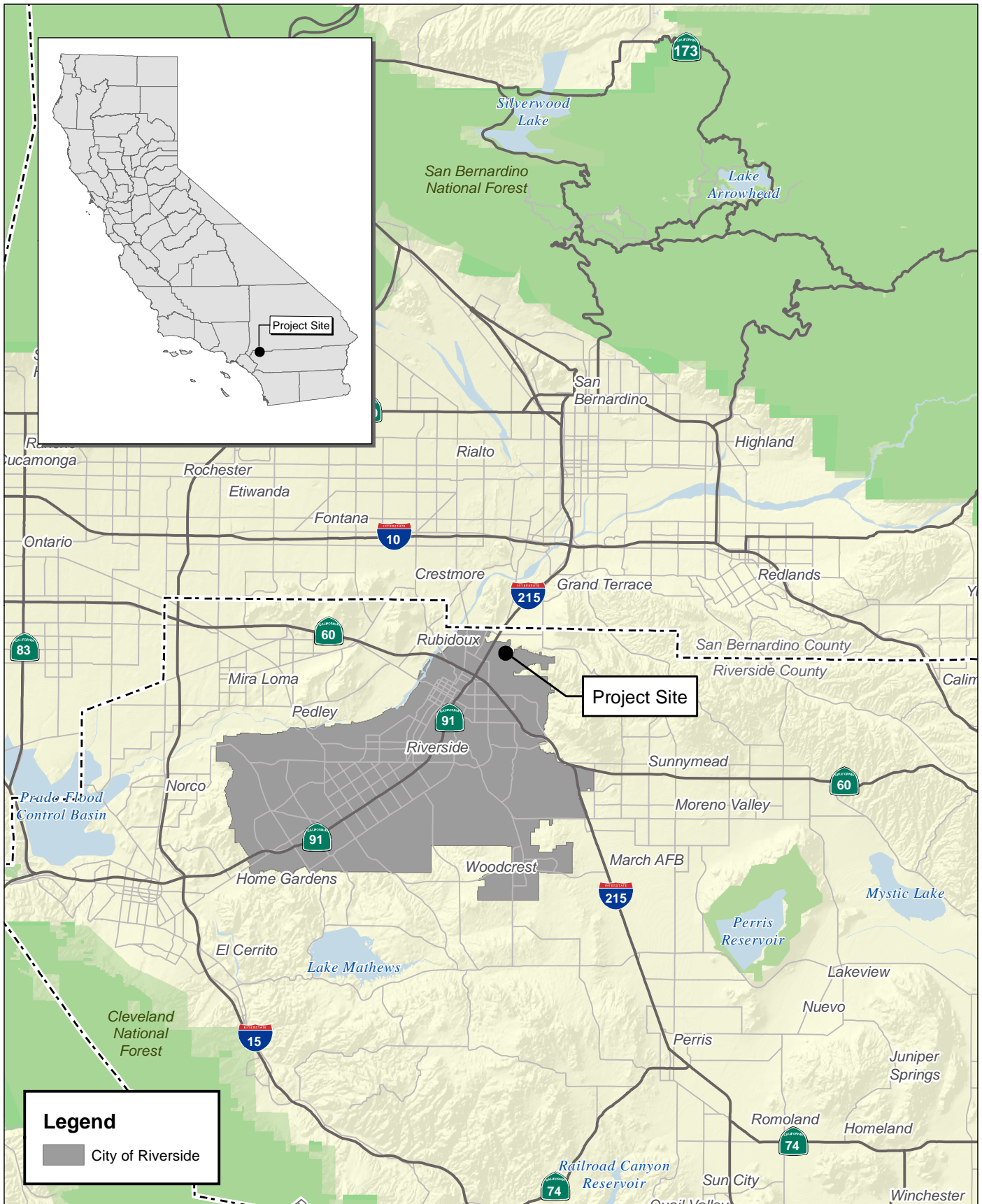
### **Construction and Phasing**

The following construction schedule was assumed for the purposes of this environmental analysis. The proposed project would be constructed in a single phase beginning in the fourth quarter of 2023. Demolition and grading would occur within the first month of construction, and the proposed project is expected to be operational in the third quarter of 2024.

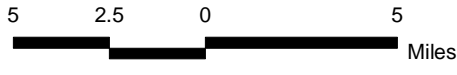
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<sup>3</sup> City of Riverside. 2019. Riverside Citywide Design Guidelines. Website: [https://riversideca.gov/cedd/sites/riversideca.gov.ceedd/files/pdf/planning/Citywide\\_Design\\_and\\_Sign\\_Guidelines\\_web%20version\\_Amended%2001-15-19\\_1.pdf](https://riversideca.gov/cedd/sites/riversideca.gov.ceedd/files/pdf/planning/Citywide_Design_and_Sign_Guidelines_web%20version_Amended%2001-15-19_1.pdf). Accessed February 10, 2023.

<sup>4</sup> City of Riverside. 2020. Good Neighbor Guidelines for Industrial Facilities. Website: <https://riversideca.gov/cedd/sites/riversideca.gov.ceedd/files/pdf/planning/2021/Good%20Neighbor%20Guidelines.pdf>. Accessed February 10, 2023.



Source: Census 2000 Data, The California Information Library (CaSIL).



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Source: Bing Aerial Imagery.

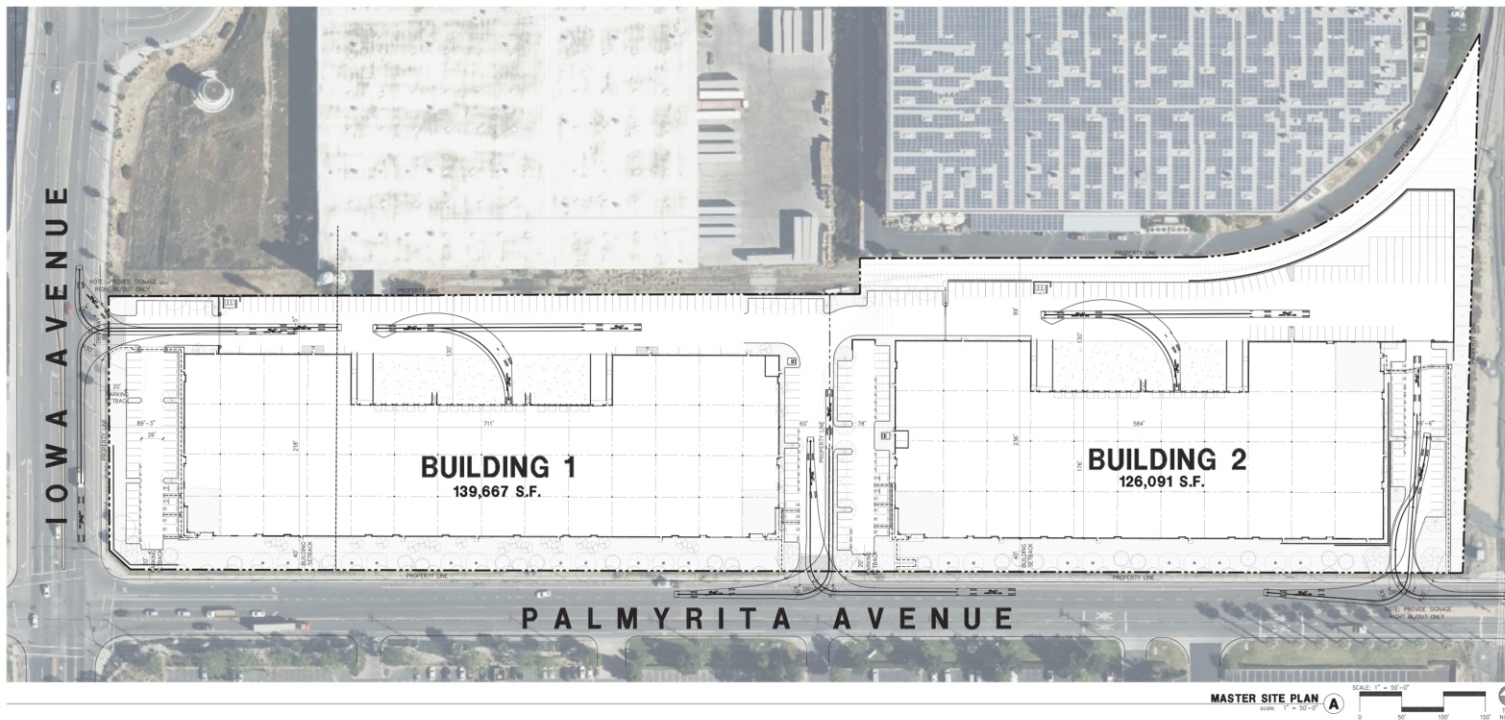
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## Exhibit 2 Local Vicinity Map

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**TABULATION**

	BUILD 1	BUILD 2	TOTAL
<b>AREAS</b>			
Office	282,214	310,000	592,214 S.F.
Warehouse	6,500	7,700	14,200 S.F.
<b>BASEMENTS</b>			
Office - 1st Floor	4,500	6,000	10,500 S.F.
Office - 2nd Floor	5,500	4,400	9,900 S.F.
Warehouse	100,000	100,000	200,000 S.F.
<b>TOTAL</b>	198,214	228,100	426,314 S.F.
<b>CONCRETE</b>	45,000	45,000	90,000 S.F.
<b>ASPHALT/PAVING REQUIRED</b>			
Office - 100% S.F.	30	30	60 S.F.
Warehouse - 100% S.F.	100	100	200 S.F.
<b>TOTAL</b>	130	130	260 S.F.
<b>ASPHALT/PAVING PROVIDED</b>			
Standard (8' x 18')	105	105	210 S.F.
Handicap (5' x 8')	4	4	8 S.F.
Accessible (8' x 18')	2	2	4 S.F.
Office Accessible (8' x 18')	1	1	2 S.F.
Warehouse Accessible (8' x 18')	16	16	32 S.F.
Clear Accessible (8' x 18')	3	3	6 S.F.
<b>TOTAL</b>	128	128	258 S.F.
<b>TOTAL PAVING PROVIDED</b>	9	9	18 S.F.

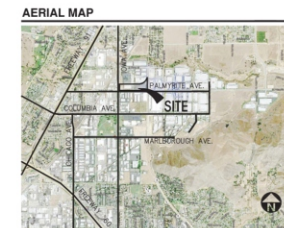
**LANDSCAPING FOR CITY**  
BMP - Business and Manufacturing Park Zone  
Standard New Onsite Zone (Forest Business Park)

**MAXIMUM BUILDING HEIGHT ALLOWED**  
All - 40'  
Aerial - 42'  
Maximum Allowable Height

**LANDSCAPING PROVIDED**  
50% of parking lot area

	AC	ASPH	TOTAL
AC	14,200	14,200	28,400 S.F.
ASPH	42,600	42,600	85,200 S.F.

**NOTES**  
1. Office - 40' (40,000 sq ft), 20' (80,000 sq ft max)  
2. Warehouse - 40' (40,000 sq ft), 20' (80,000 sq ft max)  
3. Landscaping - 10' (10,000 sq ft)



**SITE LEGEND**

- LANDSCAPED AREA
- AC PAVING - SEE "C" DRAWING FOR THICKNESS
- CONCRETE PAVING - SEE "C" DRAWING FOR THICKNESS
- STANDARD PARKING STALL (8' X 18')
- HANDICAP PARKING STALL (5' X 8')
- CLEAR ASPHALT/CONCRETE STALL FOR TRAILER
- TRAILER PARKING (8' X 30')
- 24" WIDE FIRE LINE - FIRE DEPT STANDARD
- ACCESSIBLE PATH OF TRAVEL

**PROPERTY OWNER**  
DEDEAUX PROPERTIES  
100 WILTON BLVD, SUITE 200  
SANTA MONICA, CA 90405  
CONTACT: BENJAMIN HORNING  
PHONE: 310-381-8228

**ADDRESS OF THE PROPERTY**  
NORTHEAST CORNER OF IOWA AVE AND PALMYRITA AVENUE

**ASSESSOR'S PARCEL NUMBER**  
024-170-030  
0247-170-030

**SCOPE OF WORK**  
(1) INDUSTRIAL BUILDING TOTALING APPROXIMATELY 260,758 SF ON APPROXIMATELY 13.83 ACRES OF LAND.

**ZONING**  
BUSINESS AND MANUFACTURING PARK (BMP)

**ADJACENT USES**  
BUSINESS AND MANUFACTURING PARK (BMP) ON ALL SIDES

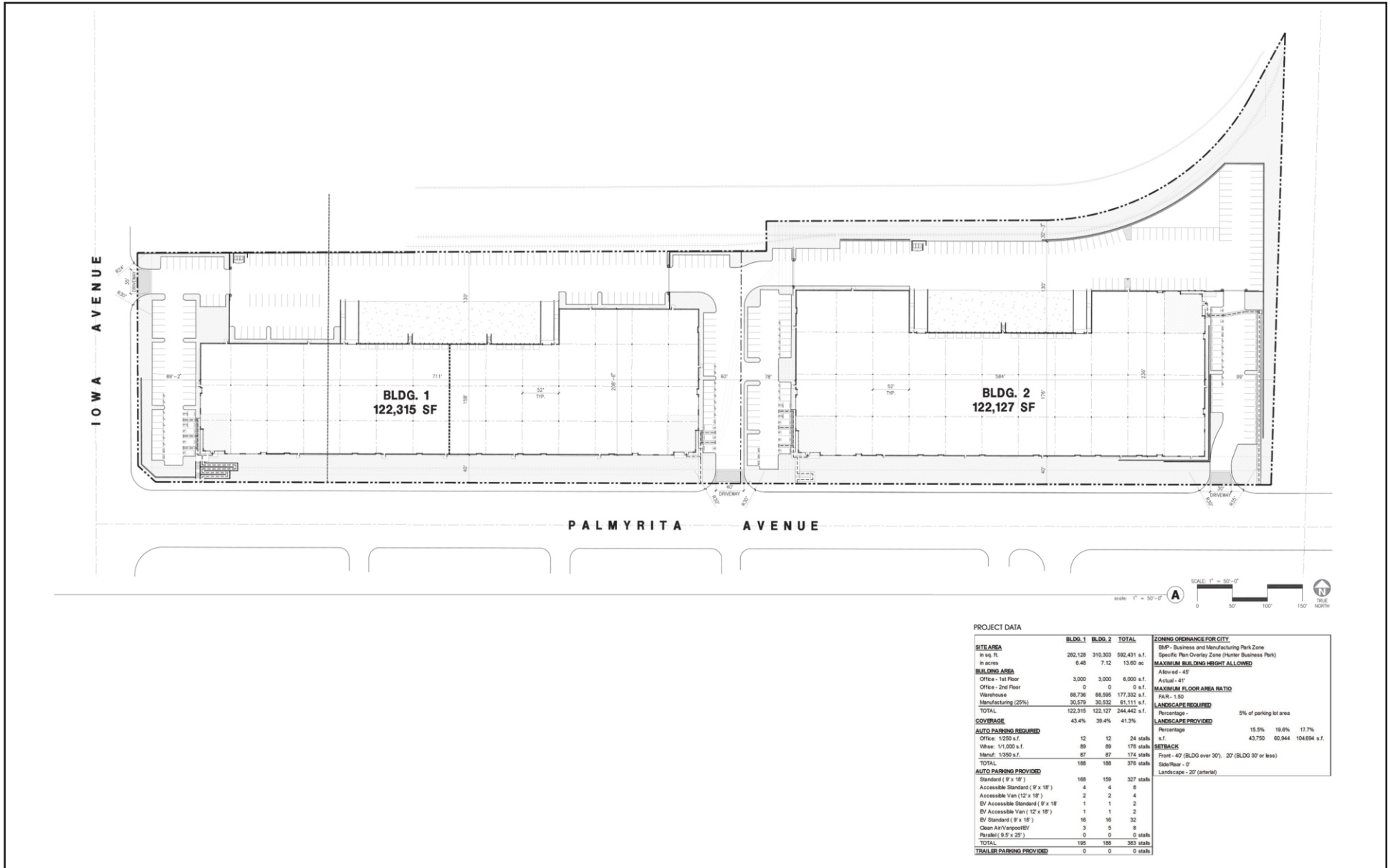
**APPLICANT**  
DEDEAUX PROPERTIES  
100 WILTON BLVD, SUITE 200  
SANTA MONICA, CA 90405  
CONTACT: BENJAMIN HORNING  
PHONE: 310-381-8228

**APPLICANT'S REPRESENTATIVE**  
HPA, Inc.  
18251 BARDEN AVE, SUITE 100  
REVUE, CA 92012  
TEL: 949-853-1700  
ATtn: BRUCE KIM

Source: HPA, Inc. 02/10/2023.



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PROJECT DATA			ZONING ORDINANCE FOR CITY		
<b>SITE AREA</b>	<b>BLDG. 1</b>	<b>BLDG. 2</b>	<b>TOTAL</b>	<b>BLP - Business and Manufacturing Park Zone</b>	
In sq. ft.	282,138	310,303	592,441 s.f.	Specific Plan Overlay Zone (Historic Business Park)	
In acres	6.48	7.12	13.60 ac	<b>MAXIMUM BUILDING HEIGHT ALLOWED</b>	
<b>BUILDING AREA</b>				Allowed - 40'	
Office - 1st Floor	3,000	3,000	6,000 s.f.	Actual - 41'	
Office - 2nd Floor	0	0	0 s.f.	<b>MAXIMUM FLOOR AREA RATIO</b>	
Warehouse	88,736	88,595	177,332 s.f.	FAR - 1.50	
Manufacturing (25%)	30,579	30,532	61,111 s.f.	<b>LANDSCAPE REQUIRED</b>	
<b>TOTAL</b>	<b>122,315</b>	<b>122,127</b>	<b>244,442 s.f.</b>	Percentage	5% of parking lot area
<b>COVERAGE</b>	43.4%	39.4%	41.3%	<b>LANDSCAPE PROVIDED</b>	
<b>AUTO PARKING REQUIRED</b>				Percentage	15.5% 19.6% 17.7%
Office: 1050 s.f.	12	12	24 stalls	s.f.	43,700 60,844 104,894 s.f.
Warehouse: 111,000 s.f.	89	89	178 stalls	<b>SETBACK</b>	
Manuf.: 1350 s.f.	87	87	174 stalls	Front - 40' (BLDG over 30'), 20' (BLDG 30' or less)	
<b>TOTAL</b>	<b>188</b>	<b>188</b>	<b>376 stalls</b>	Side/Rear - 0'	
<b>AUTO PARKING PROVIDED</b>				Landscape - 20' (optional)	
Standard (8' x 18')	168	159	327 stalls		
Accessible Standard (8' x 18')	4	4	8		
Accessible Van (12' x 18')	2	2	4		
EV Accessible Standard (8' x 18')	1	1	2		
EV Accessible Van (12' x 18')	1	1	2		
EV Standard (8' x 18')	16	16	32		
Clean Air/Vanpool/EV	3	5	8		
Parallel (8.5' x 29')	0	0	0 stalls		
<b>TOTAL</b>	<b>195</b>	<b>188</b>	<b>383 stalls</b>		
<b>TRAILER PARKING PROVIDED</b>	0	0	0 stalls		

Source: HPA, Inc. 02/10/2023.



## Scenario 2 Site Plan - 75% Warehouse and 25% Manufacturing

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## SECTION 2: REGULATORY SETTING

### 2.1 - Federal

#### 2.1.1 - Endangered Species Act

The United States Fish and Wildlife Service (USFWS) has jurisdiction over species listed as threatened or endangered under the Endangered Species Act. Section 9 of the Endangered Species Act protects listed species from “take,” which is broadly defined as actions taken to “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct.” The Endangered Species Act protects threatened and endangered plants and animals and their critical habitat. Candidate species are those proposed for listing; these species are usually treated by resource agencies as if they were actually listed during the environmental review process.

#### 2.1.2 - Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) implements international treaties between the United States and other nations devised to protect migratory birds, their parts, eggs, and nests from activities such as hunting, pursuing, capturing, killing, selling, and shipping, unless expressly authorized in the regulations or by permit. All migratory birds and their nests are protected from take and other impacts under the MBTA (16 United States Code [USC] § 703, *et seq.*).

#### 2.1.3 - Bald and Golden Eagle Protection Act

The golden eagle (*Aquila chrysaetos*) and bald eagle (*Haliaeetus leucocephalus*) are afforded additional protection under the Eagle Protection Act, amended in 1973 (16 USC § 669, *et seq.*) and the Bald and Golden Eagle Protection Act (16 USC §§ 668–668d).

#### 2.1.4 - Clean Water Act

##### Section 404

The United States Army Corps of Engineers (USACE) administers Section 404 of the federal Clean Water Act (CWA), which regulates the discharge of dredge and fill material into waters of the United States. The USACE has established a series of nationwide permits that authorize certain activities in waters of the United States if a proposed activity can demonstrate compliance with standard conditions. Normally, USACE requires an individual permit for an activity that will affect an area equal to or greater than 0.5 acre or greater than 0.5 acre of waters of the United States. A project that results in impacts to less than 0.5 acre of waters of the United States can normally be conducted pursuant to one of the nationwide permits if it is consistent with the standard permit conditions. The USACE also has discretionary authority to require an Environmental Impact Statement for projects that result in impacts to between 0.1 and 0.5 acre. Use of any nationwide permit is contingent on the activities having no impacts on endangered species.

## Section 401

As stated in Section 401 of the CWA, “any applicant for a federal permit for activities that involve a discharge to waters of the State, shall provide the federal permitting agency a certification from the State in which the discharge is proposed that states that the discharge will comply with the applicable provisions under the federal Clean Water Act.” Therefore, before the USACE will issue a Section 404 permit, applicants must apply for and receive a Section 401 Water Quality Certification from the Regional Water Quality Control Board (RWQCB).

## 2.2 - State

### 2.2.1 - CEQA Guidelines

The following California Environmental Quality Act (CEQA) Guidelines Appendix G checklist questions serve as thresholds of significance when evaluating the potential impacts of a proposed project on biological resources. Impacts are considered significant if a project would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as being a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or USFWS.
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the CDFW or USFWS.
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- Conflict with the provisions of an adopted Habitat Conservation Plan, natural community conservation plan, or other approved local, regional, or State Habitat Conservation Plan.

### 2.2.2 - California Endangered Species Act

The State of California enacted the California Endangered Species Act (CESA) in 1984. CESA pertains to State listed endangered and threatened species. CESA requires State agencies to consult with the CDFW when preparing CEQA documents to ensure that the State lead agency actions do not jeopardize the continued existence of a listed species or result in the destruction or adverse modification of habitat essential to the continued existence of those species, if there are reasonable and prudent alternatives available (Fish and Game Code [FGC] § 2080). CESA directs agencies to consult with the CDFW on projects or actions that could affect listed species, directs the CDFW to determine whether jeopardy would occur, and allows the CDFW to identify “reasonable and prudent alternatives” to the project consistent with conserving the species. CESA allows the CDFW to



authorize exceptions to the State’s prohibition against take of a listed species if the “take” of a listed species is incidental to carrying out an otherwise lawful project that has been approved under CEQA (FGC § 2081).

### 2.2.3 - California Fish and Game Code

Under CESA, the CDFW has the responsibility for maintaining a list of endangered and threatened species (FGC § 2070). Fish and Game Code Sections 2050 through 2098 outline the protection provided to California’s rare, endangered, and threatened species. Fish and Game Code Section 2080 prohibits the taking of plants and animals listed under the CESA, and Fish and Game Code Section 2081 established an incidental take permit program for State listed species. The CDFW maintains a list of “candidate species,” which it formally notices as being under review for addition to the list of endangered or threatened species.

In addition, the Native Plant Protection Act of 1977 (NPPA) (FGC § 1900, *et seq.*) prohibits the taking, possessing, or sale within the State of any plants with a State designation of rare, threatened, or endangered (as defined by the CDFW). An exception to this prohibition in the NPPA allows landowners, under specified circumstances, to take listed plant species, provided that the owners first notify CDFW and give the agency at least 10 days to come and retrieve (and presumably replant) the plants before they are plowed under or otherwise destroyed. Fish and Game Code Section 1913 exempts from “take” prohibition “the removal of endangered or rare native plants from a canal, lateral ditch, building site, or road, or other right of way.” Project impacts to these species are not considered significant unless the species are known to have a high potential to occur within the area of disturbance associated with construction of the proposed project.

In addition to formal listing under the Endangered Species Act and CESA, some species receive additional consideration by the CDFW and local lead agencies during the CEQA process. Species that may be considered for review are those listed as a “Species of Special Concern.” The CDFW maintains lists of “Species of Special Concern” that serve as species “watch lists.” Species with this status may have limited distributions or limited populations and/or the extent of their habitats has been reduced substantially, such that their populations may be threatened. Thus, their populations are monitored, and they may receive special attention during environmental review. While they do not have statutory protection, they may be considered rare under CEQA and specific protection measures may be warranted. In addition to Species of Special Concern, the CDFW Special Animals List identifies animals that are tracked by the California Natural Diversity Database (CNDDB) and may be potentially vulnerable but warrant no federal interest and no legal protection.

Sensitive species that would qualify for listing but are not currently listed are afforded protection under CEQA. CEQA Guidelines Section 15065 (Mandatory Findings of Significance) requires that a substantial reduction in numbers of a rare or endangered species be considered a significant effect. CEQA Guidelines Section 15380 (Rare or Endangered Species) provides for the assessment of unlisted species as rare or endangered under CEQA if the species can be shown to meet the criteria for listing. Unlisted plant species on the California Native Plant Society (CNPS) List ranked 1A, 1B, and 2 would typically require evaluation under CEQA.

Fish and Game Code Sections 3500—5500 outline protection for fully protected species of mammals, birds, reptiles, amphibians, and fish. Species that are fully protected by these sections

may not be taken or possessed at any time. The CDFW cannot issue permits or licenses that authorize the take of any fully protected species, except under certain circumstances such as scientific research and live capture and relocation of such species pursuant to a permit for the protection of livestock.

Under Fish and Game Code Section 3503.5, it is unlawful to take, possess, or destroy any birds in the orders of *Falconiformes* or *Strigiformes* (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto. To comply with the requirements of CESA, an agency reviewing a proposed project within its jurisdiction must determine whether any State listed endangered or threatened species may be present in the project study area and determine whether the proposed project will have a potentially significant impact on such species. In addition, the CDFW encourages informal consultation on any proposed project that may impact a candidate species.

Project-related impacts to species on the CESA endangered or threatened list would be considered significant. State listed species are fully protected under the mandates of CESA. “Take” of protected species incidental to otherwise lawful management activities may be authorized under Fish and Game Code Section 206.591. Authorization from the CDFW would be in the form of an Incidental Take Permit.

Fish and Game Code Section 1602 requires any entity to notify the CDFW before beginning any activity that “may substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of any river, stream, or lake” or “deposit debris, waste, or other materials that could pass into any river, stream, or lake.” “River, stream, or lake” includes waters that are episodic and perennial and ephemeral streams, desert washes, and watercourses with a subsurface flow. A Lake or Streambed Alteration Agreement will be required if the CDFW determines that project activities may substantially adversely affect fish or wildlife resources through alterations to a covered body of water.

#### 2.2.4 - California Porter-Cologne Water Quality Control Act

The RWQCB regulates actions that would involve “discharging waste, or proposing to discharge waste, within any region that could affect the water of the State” (Water Code § 13260(a)), pursuant to provisions of the Porter-Cologne Water Quality Act. “Waters of the State” are defined as “any surface water or groundwater, including saline waters, within the boundaries of the State” (Water Code § 13050(e)).

#### 2.2.5 - California Native Plant Society Rare Plant Rankings

The CNPS maintains a rank of plant species that are native to California and that have low population numbers, limited distribution, or are otherwise threatened with extinction. This information is published in the Inventory of Rare and Endangered Vascular Plants of California. Following are the definitions of the CNPS ranks:

- **Rank 1A:** Plants presumed extirpated in California and either rare or extinct elsewhere
- **Rank 1B:** Plants Rare, Threatened, or Endangered in California and elsewhere

- **Rank 2A:** Plants presumed extirpated in California but common elsewhere
- **Rank 2B:** Plants rare, threatened, or endangered in California but more common elsewhere
- **Rank 3:** Plants about which more information is needed
- **Rank 4:** Watch List: Plants of limited distribution

Potential impacts to populations of CNPS ranked plants receive consideration under CEQA review. All plants appearing on the CNPS List ranked 1 or 2 are considered to meet the CEQA Guidelines Section 15380 criteria. Rank 3 and 4 plants do not automatically meet this definition. Rank 4 plants do not clearly meet CEQA standards and thresholds for impact considerations.<sup>5</sup>

## 2.3 - Regional and Local

### 2.3.1 - Western Riverside County Multiple Species Habitat Conservation Plan

The MSHCP serves as a multijurisdictional Habitat Conservation Plan pursuant to Section 10(a)(1)(B) of the Endangered Species Act and a Natural Communities Conservation Plan pursuant to Fish and Game Code Section 2081.1 that focuses on the conservation of species and habitats in western Riverside County. The MSHCP allows permittees to obtain take of threatened, endangered, and rare plant and animal species covered by the MSHCP. Regulation of take of species is authorized by the USFWS and the CDFW for lawful actions (e.g., public and private projects) in exchange for the assembly and management of a conservation reserve system. The MSHCP covers take of 146 species in the plan area, including 32 that are State and/or federally listed.

The MSHCP area encompasses approximately 1.26 million acres and includes all unincorporated land in Riverside County west of the crest of the San Jacinto Mountains to the Orange County line, inclusive of the jurisdictional areas of the cities of Eastvale, Jurupa Valley, Wildomar, Menifee, San Jacinto, Hemet, Perris, Calimesa, Beaumont, Banning, Moreno Valley, Riverside, Corona, Norco, Canyon Lake, Lake Elsinore, Murrieta, and Temecula. Conservation areas that comprise the reserve system will be assembled from Criteria Area cells that consist of 0.75-section cells of approximately 160 acres, each with specific criteria for conservation.

The Conservation Areas that comprise the reserve system will total 500,000 acres when complete, which is projected by 2028. Of the 500,000 acres targeted for conservation, 347,000 were in existing open spaces in Public/Quasi-Public (PQP) Lands at the time the MSHCP was adopted in 2003. These lands are under ownership or management of government agencies and their development is not likely. The County and City permittees are responsible for assembling the remaining 153,000 acres in the reserve system by 2028 through implementing the MSHCP during the development and entitlement process.

<sup>5</sup> California Native Plant Society (CNPS). 2020. Considerations for Including CRPR 4 Plant Taxa in CEQA Biological Resource Impact Analysis. Sacramento, CA. 21 January 2020.

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## SECTION 3: METHODS

### 3.1 - Literature and Database Reviews

This literature review provides a baseline from which to evaluate potential project impacts on biological resources on the project site and in the surrounding area.

#### 3.1.1 - Existing Documentation

As part of the literature review, an FCS Biologist examined existing environmental documentation for the project site and vicinity. This documentation included literature pertaining to the habitat requirements of special-status species with the potential to occur in the project vicinity; and federal register listings, protocols, and species data provided by the USFWS and CDFW.

#### 3.1.2 - Topographic Maps and Aerial Photographs

An FCS Biologist reviewed current USGS 7.5-minute topographic quadrangle map(s) and aerial photographs as a preliminary analysis of the existing conditions within the project site and immediate vicinity.<sup>6</sup> Information obtained from the topographic maps included elevation, general watershed information, and potential drainage feature locations using Google Earth in conjunction with the United States Environmental Protection Agency (EPA) Watershed Assessment, Tracking, and Environmental Results System (WATERS).<sup>7</sup> Aerial photographs provided a perspective of the current site conditions relative to on-site and off-site land use, plant community locations, and potential locations of wildlife movement corridors.

#### 3.1.3 - Soil Surveys

The United States Department of Agriculture (USDA) has published soil surveys that describe the soil series (i.e., group of soils with similar profiles) occurring within a particular area.<sup>8</sup> These profiles include major horizons with similar thickness, arrangement, and other important characteristics. These series are further subdivided into soil mapping units that provide specific information regarding soil characteristics. Many special-status plant species have a limited distribution based exclusively on soil type. Therefore, pertinent USDA soil survey maps were reviewed to determine the existing soil mapping units within the project site and to establish whether the soil conditions on-site are suitable for any special-status plant species.

#### 3.1.4 - Special-status Species Database Search

An FCS Biologist compiled a list of threatened, endangered, and otherwise special-status species previously recorded within the project vicinity based on a search of the USFWS Information for

<sup>6</sup> United States Geological Survey (USGS). 2022. National Geospatial Program. Website: [https://www.usgs.gov/core-science-systems/national-geospatial-program/us-topo-maps-america?qt-science\\_support\\_page\\_related\\_con=4#qt-science\\_support\\_page\\_related\\_con](https://www.usgs.gov/core-science-systems/national-geospatial-program/us-topo-maps-america?qt-science_support_page_related_con=4#qt-science_support_page_related_con). Accessed July 21, 2022.

<sup>7</sup> United States Environmental Protection Agency (EPA). 2022. Watershed Assessment, Tracking and Environmental Results System (WATERS). Website: <https://www.epa.gov/waterdata/waters-watershed-assessment-tracking-environmental-results-system>. Accessed July 21, 2022.

<sup>8</sup> Natural Resources Conservation Service (NRCS). 2022. Web Soil Survey (WSS). United States Department of Agriculture (USDA). Website: <https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>. Accessed July 21, 2022.

Planning and Consultation (IPaC) database,<sup>9</sup> the CNDDDB, and the CNPS Electronic Inventory (CNPSEI) of Rare and Endangered Vascular Plants of California.<sup>10,11</sup> The CNDDDB search focused on species records within 5 and 10 miles of the project site. The CNPSEI search focused on records from the *San Bernardino South*, USGS 7.5-minute Topographic Quadrangle Map and the eight surrounding quadrangles. The CNDDDB Biogeographic Information and Observation System (BIOS 5) was used to determine distances between species occurrences and the project site.<sup>12</sup>

The potential for occurrence on the project site was assessed for each of the special-status species identified in the database searches. The potential for occurrence was assessed based on conditions on the project site, habitat requirements of special-status species, and number of recent (< 25 years old) occurrences in the project vicinity.

### 3.1.5 - Trees and Native Vegetation

Prior to conducting the reconnaissance-level field survey, an FCS Biologist reviewed applicable City and County ordinances pertaining to tree and native vegetation preservation and protection and ascertained whether measures or permits are required to remove, replace, or transplant protected trees or native vegetation.

### 3.1.6 - Jurisdictional Waters and Wetlands

Prior to conducting the reconnaissance-level survey, an FCS Biologist reviewed EPA WATERS and aerial photography to identify potential natural drainage features and water bodies.<sup>13</sup> In general, all surface drainage features identified as blue-line streams on USGS maps and linear patches of vegetation are expected to exhibit evidence of flows and considered potentially subject to State and federal regulatory authority as waters of the United States and/or State. A preliminary assessment was conducted to determine the location of any existing drainages and limits of project-related grading activities to aid in determining whether a formal delineation of waters of the United States or State is necessary.

### 3.1.7 - MSHCP Information Map

As part of the MSHCP Consistency Analysis, an FCS Biologist reviewed the Regional Conservation Authority (RCA) MSHCP Information Map<sup>14</sup> to assess species survey and conservation requirements for the parcels that comprise the project site.

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<sup>9</sup> United States Fish and Wildlife Service (USFWS). 2022. Information for Planning and Consultation (IPaC). Website: <https://ecos.fws.gov/ipac/>. Accessed July 21, 2022.

<sup>10</sup> California Department of Fish and Wildlife (CDFW). 2022. CNDDDB RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: <https://map.dfg.ca.gov/rarefind/view/RareFind.aspx>. Accessed July 21, 2022.

<sup>11</sup> California Native Plant Society (CNPS). 2022. California Native Plant Society Rare and Endangered Plant Inventory. Website: <http://www.rareplants.cnps.org/>. Accessed July 21, 2022.

<sup>12</sup> California Department of Fish and Wildlife (CDFW). 2022. Biogeographic Information and Observation System (BIOS 5). Website: <https://map.dfg.ca.gov/bios/>. Accessed July 21, 2022.

<sup>13</sup> United States Environmental Protection Agency (EPA). 2022. Watershed Assessment, Tracking and Environmental Results System (WATERS). Website: <https://www.epa.gov/waterdata/waters-watershed-assessment-tracking-environmental-results-system>. Accessed July 21, 2022.

<sup>14</sup> Regional Conservation Authority (RCA). 2022. Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Information Map. Website: <https://wrcrca.maps.arcgis.com/apps/webappviewer/index.html?id=a73e69d2a64d41c29ebd3acd67467abd>. Accessed July 21, 2022.

## 3.2 - Field Surveys

### 3.2.1 - Survey Personnel

A general biological survey and vegetation community mapping of the project site was performed on July 26, 2022, by FCS Senior Biologist Michael Tuma, PhD (brief resume presented in Appendix A).

### 3.2.2 - General Biological Survey

The objective of the general biological survey was to ascertain general site conditions and identify whether existing vegetation communities provide suitable habitat for special-status plant or wildlife species. During this survey, the Biologist walked and drove the project site and characterized and mapped vegetation communities, identified and recorded plants and wildlife observed on-site, and recorded evidence of wildlife habitats, including wildlife corridors, nests, dens, or burrows. Special-status or unusual biological resources identified during the literature review were ground-truthed during the field survey for mapping accuracy. Special attention was paid to sensitive habitats and areas potentially supporting special-status floral and faunal species.

#### Vegetation Communities and Plants

Common plant species observed during the general biological survey were identified by visual characteristics and morphology in the field and recorded in a field notebook and on field maps. Uncommon and fewer familiar plants were identified with the use of taxonomical guides, including Jepson eFlora and Calflora.<sup>15,16</sup> Taxonomic nomenclature used in this study follows The Jepson Manual: Vascular Plants of California.<sup>17</sup> Common plant names, when not available from The Jepson Manual, were taken from other regionally specific references. Vegetation community types and boundaries were noted on aerial photos, verified through field observation, and digitized using ESRI ArcGIS software® ArcMap 10.0. By incorporating collected field data and interpreting aerial photography, a map of habitat types, land cover types, and other biological resources within the project site was prepared. Vegetation community and land cover types used to help classify habitat types are based on the Manual of California Vegetation (MCV) and cross-referenced with the CDFW Natural Communities List.<sup>18,19</sup>

#### Wildlife

Wildlife species detected during the general biological survey by sight, calls, tracks, scat, or other signs were recorded. Notations were made regarding suitable habitat for those special-status species determined to have the potential to occur within the project site.<sup>20</sup> Appropriate field guides were

<sup>15</sup> Jepson Flora Project (eds.) 2022. Jepson eFlora, <https://ucjeps.berkeley.edu/eflora/>. Accessed on July 21, 2022.

<sup>16</sup> Calflora. 2020. Calflora: Information on California plants for education, research, and conservation. Website: <http://www.calflora.org/>. Accessed on July 21, 2022.

<sup>17</sup> Baldwin, B., et al. 2012. The Jepson Manual: Vascular Plants of California. Berkeley: University of California Press. County of San Bernardino (Bernardino). 2007 (amended 2015).

<sup>18</sup> Sawyer, J.O., T. Keeler-Wolf, and J.M. Evens. 2009. A Manual of California Vegetation, Second Edition. California Native Plant Society, Sacramento. 1300 pp.

<sup>19</sup> California Department of Fish and Wildlife (CDFW). 2022. Natural Communities List, Sacramento: California Department of Fish and Wildlife. Website: <https://wildlife.ca.gov/Data/VegCAMP/Natural-Communities#sensitive%20natural%20communities>. Accessed July 21, 2022.

<sup>20</sup> California Department of Fish and Wildlife (CDFW). 2022. CNDDDB RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: <https://map.dfg.ca.gov/rarefind/view/RareFind.aspx>. Accessed July 21, 2022.

used to assist in species identification during surveys, such as Peterson, Reid, and Stebbins.<sup>21,22,23</sup> Online resources such as eBird and California Herps were also consulted, as necessary.<sup>24,25</sup>

### Wildlife Movement Corridors

Wildlife movement corridors link areas of suitable wildlife habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance. Urbanization and the resulting fragmentation of open space areas create isolated “islands” of wildlife habitat, forming separated populations. Corridors act as an effective link between populations.

The project site was evaluated for evidence of a wildlife movement corridor during the general biological survey. The scope of the biological resource assessment did not include a formal wildlife movement corridor study utilizing track plates, camera stations, scent stations, or snares. Rather, the focus of this study was to determine whether a change in land use at the project site could have significant impacts on the regional movement of wildlife. Conclusions are based on the information compiled during the literature review, including aerial photographs, USGS topographic maps, and resource maps for the vicinity; the field survey; and professional experience with the desired topography, habitat, and resource requirements of the special-status species potentially utilizing the project site and vicinity.

### 3.2.3 - Habitat Assessment for Burrowing Owl

Concurrent with the general biological survey, the FCS Biologist performed a habitat assessment for burrowing owls. The FCS Biologist walked the project site and scanned adjacent, undeveloped lands within 500 feet of the project boundary, characterized and mapped vegetation communities, and searched for suitable habitat for burrowing owls, including open habitats with low-growing and/or spaced vegetation and burrows or other potential cover (e.g., concrete slabs, pipes). No burrowing owls were observed during the survey.

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<sup>21</sup> Peterson, T.R. 2010. *A Field Guide to Birds of Western North America*, 4<sup>th</sup> Edition. Boston: Houghton Mifflin Harcourt.

<sup>22</sup> Reid, F. 2006. *A Field Guide to Mammals of North America*, Fourth Edition. Boston: Houghton Mifflin Harcourt.

<sup>23</sup> Stebbins, R.C. 2003. *A Field Guide to Western Reptiles and Amphibians*. Third Edition. Boston: Houghton Mifflin Harcourt.

<sup>24</sup> eBird. 2022. Online bird occurrence database. Website: <http://ebird.org/content/ebird/>. Accessed July 21, 2022.

<sup>25</sup> California Herps. 2022. *A Guide to the Amphibians and Reptiles of California*. Website: <http://www.californiaherps.com/>. Accessed July 21, 2022.



## SECTION 4: RESULTS

This section summarizes the results of the literature search and general biological reconnaissance survey. The results of the sensitive biological resources database reviews and an analysis for the potential for occurrence of these resources on the project site are presented in Section 5. An analysis of project requirements for MSHCP consistency is presented in Section 6.

### 4.1 - Literature Review

#### 4.1.1 - Environmental Setting

The project site is situated on an alluvial fan approximately 2.4 miles east of the Santa Ana River channel and approximately 0.6 mile north of the northwestern extent of the Box Springs Mountains. Spring Brook, a tributary of the Santa Ana River, is located approximately 0.3 mile north of the project site. Elevation at the project site ranges between approximately 960 feet (293 meters) above mean sea level on the east side of the site to approximately 940 feet (287 meters) on the west side of the site.

#### Soils

The Natural Resource Conservation Service (NRCS) Web Soil Survey (WSS) mapped two soil types (Buren fine sandy loam, 2 to 8 percent slopes and Greenfield sandy loam, 2 to 8 percent slopes) on the project site and off-site roadway and frontage improvement areas (Exhibit 4). The Buren series soils are well-drained, yellowish brown, moderately alkaline, sandy loams and fine sandy loams. The Greenfield series soils are pale brown, slightly acid, coarse sandy loam. These soil types occur on gently to strongly sloping alluvial fans and terraces.

### 4.2 - Biological Surveys

FCS Senior Biologist Michael Tuma, PhD conducted a general biological survey of the project site on July 26, 2022, between approximately 9:00 a.m. to 10:15 a.m. Weather conditions during the field surveys were hazy, with an average temperature around 76°F (degrees Fahrenheit), and wind speeds between 0 and 3 miles per hour (mph).

#### 4.2.1 - Vegetation Communities and Land Use

The project site consists predominantly of developed lands containing a warehouse and paved parking lot. Portions of the project site on the east and west sides are undeveloped and support non-native grassland vegetation. The northern side of the project is bound by railroad tracks and neighboring development and the eastern side is bound by railroad tracks. The southern and western sides of the project are bound by Palmyrita Avenue and Iowa Avenue, respectively. The project site is surrounded by urbanized development, with the exception of a small, undeveloped area north of the western portion of the project site. The vegetation communities and land cover types recorded on and adjacent to the project site are described below. A map showing vegetation communities and land cover types is presented in Exhibit 5. Photographs are presented in Appendix B.

## Wild Oats and Annual Brome Grasslands

Two areas on the project site and an adjacent area that is off-site but within 500 feet of the project boundary are undeveloped, disturbed areas that are vegetated primarily in non-native annual species (Exhibit 4) The vegetation community in these areas is best described as wild oats and annual brome grasslands (MCV: *Avena* spp. – *Bromus* spp. Herbaceous Semi-Natural Alliance). Characteristic species in this community typically are dominated by non-native, annual grasses such as oat grasses (*Avena barbata* and/or *Avena fatua*), brome grasses (*Bromus diandrus*, *Bromus hordeaceus* and/or *Bromus rubens*), and wall barley (*Hordeum murinum*). These grass species may be co-dominant with other native or non-native, annual species in the herbaceous layer. Emergent trees and shrubs may be present at low cover.

Species observed in the wild oats and annual brome grasslands on and adjacent to the project site were dominated by wall barley (*Hordeum murinum*), red brome (*Bromus rubens*), common wild oat (*Avena fatua*), common fiddleneck (*Amsinckia intermedia*), and redstem filaree (*Erodium cicutarium*). Other species observed in this community included Mediterranean grass (*Schismus barbatus*), Australian saltbush (*Atriplex semibaccata*), Russian thistle (*Kali tragus*), white horehound (*Marrubium vulgare*), shortpod mustard (*Hirschfeldia incana*), prickly lettuce (*Lactuca seriola*), Malta thistle (*Centaurea melitensis*), Canadian horseweed (*Erigeron canadensis*), annual sunflower (*Helianthus annuus*), salt grass (*Distichlis spicata*), cheeseweed (*Malva neglecta*), and puncture vine (*Tribulus terrestris*).

## Developed

Developed areas are characterized by urbanization that includes a combination of a developed and hardscaped features, landscaped and manicured vegetation, and disturbed areas with bare soil surfaces supporting ruderal vegetation. Developed and hardscaped areas include buildings, paved roads, parking lots, and sidewalks. Manicured, landscaped areas typically feature street/shade trees, lawns, and shrubs with little or no exposed soil substrates. Irrigation and fertilization of landscaped areas allow for tropical and other non-native and ornamental species to flourish in urban areas. Trees are often grown in a spaced pattern with an open understory, and lawns are typically one species maintained at a continuous, uniform height. Shrubs are grown as spaced individuals or in tight rows that are hedged. Developed areas often include areas with bare soil surfaces and weedy vegetation primarily composed of non-native, annual plant species. Developed areas provide habitat to a low diversity of wildlife that are tolerant of human-modified environments.

Most of the project site and adjacent areas within 500 feet of the project boundary, including the off-site roadway and frontage improvement areas are developed and include industrial and commercial developments. On the project site, urbanized developments include an existing warehouse and associated offices, an expansive parking area, sidewalks, and a railroad spur. Landscaped vegetation is located on the southern boundary of the project along Palmyrita Avenue and adjacent to the warehouse. The landscaped areas of the project site contain ornamental trees, shrubs, and annual grasses and herbs, including Mexican fan palm (*Washingtonia robusta*), camphor tree (*Cinnamomum camphora*), guava (*Psidium guajava*), Queensland brush box (*Lophostemon confertus*), sweetgum (*Liquidambar styraciflua*), carrotwood (*Cupaniopsis anacardioides*), coast live oak (*Quercus agrifolia*), Fremont cottonwood (*Populus fremontii*), bottlebrush (*Callistemon* spp.),

crepe myrtle (*Lagerstroemia* sp.), bougainvillea (*Bougainvillea* sp.), hibiscus (*Hibiscus* sp.), fountain grass (*Pennisetum setaceum*), society garlic (*Tulbaghia violacea*), and Bermuda grass (*Cynodon dactylon*). Ruderal vegetation was observed in landscaped areas, edges of parking areas, along the railroad tracks, and in a concrete-lined wet ditch, where species included a mixture of herbaceous and woody vegetation, including common dandelion (*Taraxacum officinale*), black medic (*Medicago lupulina*), broadleaf plantain (*Plantago major*), marsh parsley (*Apium graveolens*), buttercup oxalis (*Oxalis pes-caprae*), rabbitsfoot grass (*Polypogon monspeliensis*), tall flatsedge (*Cyperus eragrostis*), fringed willowherb (*Epilobium ciliatum*), mulefat (*Baccharis salicifolia*), Goodding's willow (*Salix gooddingii*), shortpod mustard, Malta thistle (*Centaurea melitensis*), telegraph weed (*Heterotheca grandiflora*), Russian thistle, annual sunflower, tree tobacco (*Nicotiana glauca*), brittlebush (*Encelia farinosa*), stinkwort (*Dittrichia graveolens*), tamarisk (*Tamarix* spp.), Menzies' goldenbush (*Isocoma menziesii*), palo verde (*Parkinsonia* spp.), tree of heaven (*Ailanthus altissima*), fringed twinevine (*Funastrum cynanchoides*), Italian thistle (*Carduus pycnocephalus*), white horehound, California buckwheat (*Eriogonum fasciculatum*), prickly lettuce, spotted spurge (*Euphorbia maculata*), Canada horseweed, hairy fleabane (*Erigeron pulchellus*), jungle rice (*Echinochloa colona*), and candy grass (*Eragrostis cilianensis*).

#### 4.2.2 - Wildlife

The vegetation community and land cover types on the project site provide habitat for wildlife species that are tolerant of urbanized areas. As well, the anthropogenic features on the project site (buildings and ornamental trees) could provide habitat for several wildlife species. Wildlife activity during the general biological reconnaissance survey was moderate and consisted primarily of avian species. Evidence of other species was evident in tracks, scat, and other signs. The following discussions regarding the wildlife species observed within the project site are organized by taxonomic group. Each discussion contains representative examples of a particular taxonomic group either observed or expected to occur on-site. No special-status wildlife species were observed during the survey.

##### Invertebrates

No invertebrates were observed on-site, but those that likely occur at the site year-round or during seasonal pulses include several species of beetles, flies, ants, bees, wasps, moths and butterflies, and spiders and tarantulas, among others.

##### Amphibians and Fish

No amphibian or fish species were observed on-site during the general biological reconnaissance surveys. Because of the urbanized nature of the project site and vicinity, and a lack of permanent or sufficient water sources, fish and amphibians are not expected to occur on-site.

##### Reptiles

Two reptiles, western side-blotched lizard (*Uta stansburinia*) and western fence lizard (*Sceloporus occidentalis*), were observed on the project site.

## Birds

Avian activity was moderate during the field survey. Dr. Tuma identified common native and non-native species, including mourning dove (*Zenaida macroura*), house finch (*Haemorhous mexicanus*), Anna's hummingbird (*Calypte anna*), northern mockingbird (*Mimus polyglottos*), American kestrel (*Falco sparverius*), and lesser goldfinch (*Spinus psaltria*). Other bird species expected to occur on-site include common species typical of the region and tolerant of anthropogenic activities and features, such as Cooper's hawk (*Accipiter cooperi*), California scrub jay (*Aphelocoma californica*), and American crow (*Corvus brachyrhynchos*), and non-native species such as Eurasian collared dove (*Streptopelia decaocto*), rock pigeon (*Columba livia*), European starling (*Sturnus vulgaris*). Birds may find nesting platforms throughout the project site on bare ground, in grasses, shrubs, and trees, and on buildings.

## Mammals

One mammal species, desert cottontail (*Sylvilagus audubonii*), was directly observed on-site during the field survey. Burrows of California ground squirrels (*Otospermophilus beecheyi*) and valley pocket gophers (*Thomomys bottae*) were observed in areas vegetated in grasslands.

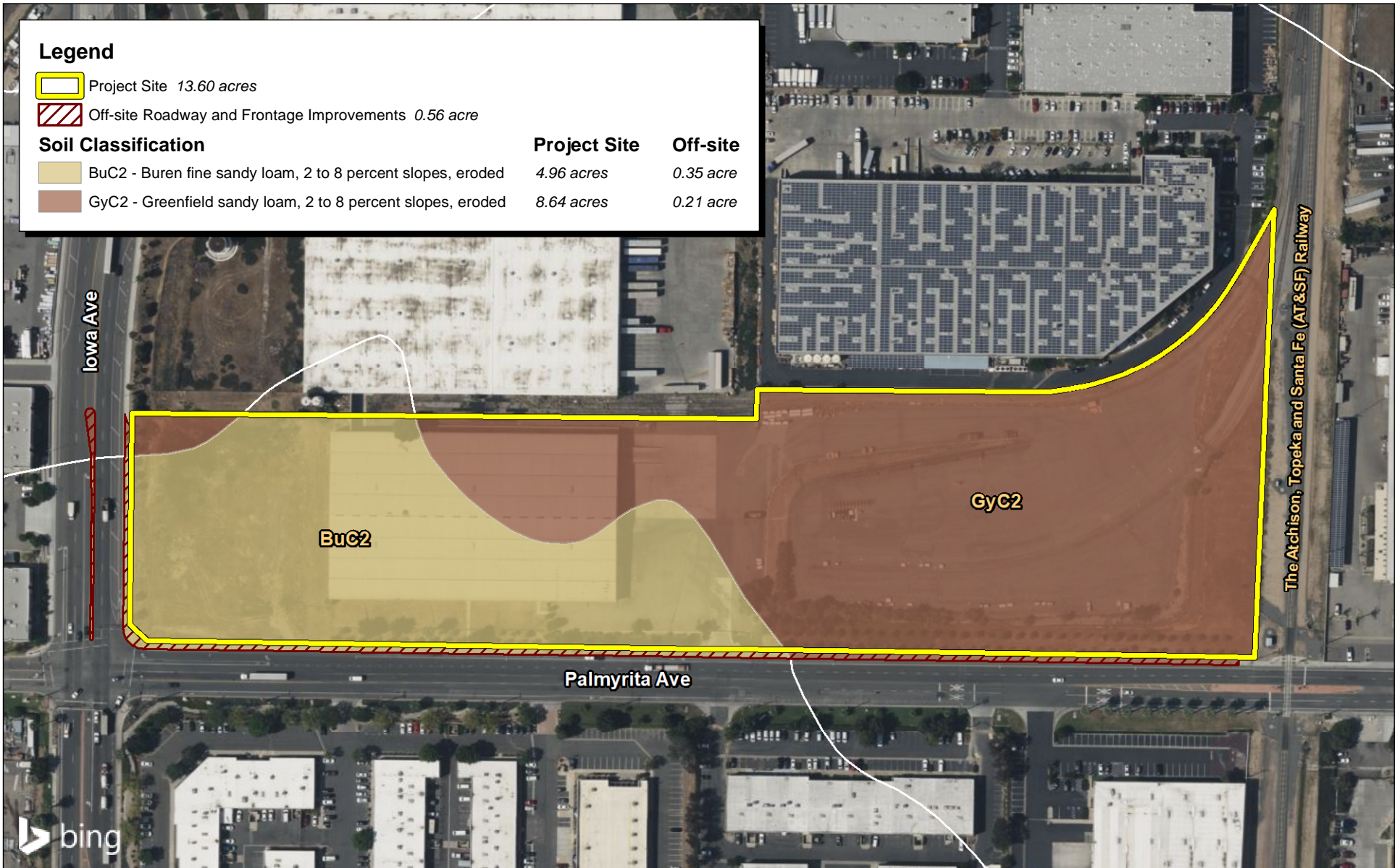
### 4.2.3 - Wildlife Movement Corridors

The majority of the project site consists of developed lands, including an existing warehouse and paved parking area. The project site is also surrounded by urbanized areas, roads, and highways that limit wildlife movement through the project site. The project site itself does not serve as a wildlife movement corridor.

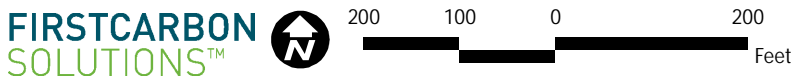
## 4.3 - Burrowing Owl Habitat Assessment

Dr. Tuma mapped burrowing owl habitat on the project site and within 500 feet of the project on July 26, 2022, during the general biological assessment. Burrowing owl habitat was mapped in the western and eastern portions of the project site and an area north of the western extent of the project site and within 500 feet of the site (Exhibit 5). These portions of the project site and the adjacent area contain suitable wild oats and annual brome grasslands habitat with low-growing vegetation. At the time of the surveys the area had been recently mowed or disked and the wild oats and annual brome grasslands were in early recovery stages. There were several California ground squirrel burrows observed in these areas of the project site. No burrowing owls were observed during the survey.





Source: Bing Aerial Imagery. Goodman & Associates, August 2022. USDA Soils Data Mart, Western Riverside County Area.



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Source: Bing Aerial Imagery. Goodman & Associates, August 2022.



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## Exhibit 5 Vegetation Community/Land Cover Map

DEDEAUX PROPERTIES, INC.  
PALMYRITA AVENUE WAREHOUSE PROJECT  
BIOLOGICAL RESOURCES ASSESSMENT AND WESTERN RIVERSIDE COUNTY  
MULTIPLE SPECIES HABITAT CONSERVATION PLAN CONSISTENCY ANALYSIS

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## SECTION 5: SENSITIVE BIOLOGICAL RESOURCES DATABASE REVIEWS

The following section discusses the results of the database reviews for sensitive biological resources and an analysis of the potential for these resources to occur within the project site based on existing biological conditions on and adjacent to the site.

### 5.1 - Sensitive Natural Communities

Sensitive natural communities are vegetation communities or special wildlife habitats that are rare or occur in limited distributions or provide specific habitat requirements for special-status plant or wildlife species. The CDFW maintains a list of natural communities which attempts to classify vegetation types found within the State of California and rank them based on rarity. Communities ranked S1-S3 are considered sensitive natural communities.<sup>26</sup> The CNDDDB identified four sensitive natural communities that are known to occur within 5 miles of the project site: Southern California Arroyo Chub, Southern Cottonwood Willow Riparian Forest, Southern Riparian Scrub, and Southern Sycamore Alder Riparian Woodland. One sensitive natural community, Riversidian Alluvial Fan Sage Scrub, has been recorded in the CNDDDB between 5 and 10 miles from the project site.<sup>27</sup> These communities are not present on or adjacent to the project site.

### 5.2 - Special-status Plant Species

Twenty-seven special-status plant species have been recorded within 10 miles of the project site in the CNDDDB<sup>28,29</sup> or on the nine quadrangle search area of the CNPSEI<sup>30</sup> (Appendix C, Table 1). Table 1 in Appendix C includes the species' status, required habitat, and a summary analysis of the potential for each of these species to occur on the project site. The potential for occurrence of a species was based on presence of suitable habitats, soil types, and proximity and number of occurrences recorded in the CNPSEI and CNDDDB.<sup>31,32,33</sup> Previous and significant surface disturbances evident throughout the project site and the presence and abundance of several non-native, invasive, annual plant species there have likely lowered the potential for persistence and occurrence of populations of many special-status plant species.

<sup>26</sup> California Department of Fish and Wildlife (CDFW). 2022. Natural Communities List, Sacramento: California Department of Fish and Wildlife. Accessed July 21, 2022.

<sup>27</sup> California Department of Fish and Wildlife (CDFW). 2022. Biogeographic Information and Observation System (BIOS 5). Website: <https://map.dfg.ca.gov/bios/>. Accessed July 21, 2022.

<sup>28</sup> California Department of Fish and Wildlife (CDFW). 2022. CNDDDB RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: <https://map.dfg.ca.gov/rarefind/view/RareFind.aspx>. Accessed July 21, 2022.

<sup>29</sup> California Department of Fish and Wildlife (CDFW). 2022. Biogeographic Information and Observation System (BIOS 5). Website: <https://map.dfg.ca.gov/bios/>. Accessed July 21, 2022.

<sup>30</sup> California Native Plant Society (CNPS). 2022. California Native Plant Society Rare and Endangered Plant Inventory. Website: <http://www.rareplants.cnps.org/>. Accessed July 21, 2022.

<sup>31</sup> California Department of Fish and Wildlife (CDFW). 2022. CNDDDB RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: <https://map.dfg.ca.gov/rarefind/view/RareFind.aspx>. Accessed July 21, 2022.

<sup>32</sup> California Native Plant Society (CNPS). 2022. California Native Plant Society Rare and Endangered Plant Inventory. Website: <http://www.rareplants.cnps.org/>. Accessed July 21, 2022.

<sup>33</sup> California Department of Fish and Wildlife (CDFW). 2022. Biogeographic Information and Observation System (BIOS 5). Website: <https://map.dfg.ca.gov/bios/>. Accessed July 21, 2022.

### 5.2.1 - Potential for Occurrence of Special-status Plants

The project site is predominantly developed, and undeveloped areas are significantly and repeatedly disturbed (disked). The project site is surrounded by urbanized development and small areas of undeveloped lands that have been repeatedly disturbed. Because of the conditions on and adjacent to the project site, all special-status plants that occur in the region were assessed as having no or low potential for occurrence (Appendix C, Table 1). Thus, special-status plants are not expected to occur on the project site and are not discussed further.

## 5.3 - Special-status Wildlife Species

Fifty special-status wildlife species were identified as occurring within 10 miles of the project site as recorded in the CNDDDB<sup>34,35</sup> and an additional species was identified<sup>34</sup> in the USFWS IPaC<sup>36</sup> review (Appendix C, Table 2). Table 2 in Appendix C includes the species' status, required habitat types and features, and potential to occur within the project site. The table also includes special-status wildlife species that have been determined to have no or low potential to occur on-site, primarily based on the absence of suitable habitat and the lack of recorded occurrence in the project vicinity, along with other justification(s) for their exclusion from further discussion. Special-status wildlife species with moderate to high potential to occur on-site are analyzed further below. The potential for wildlife to occur on the project site was based on presence of suitable habitats and occurrences recorded in the CNDDDB.<sup>37,38</sup>

### 5.3.1 - Potential for Occurrence of Special-status Wildlife

Most species with records in the project vicinity were assessed as having no or low potential to occur because the project site is outside of the known distributional range of the species or because the project site does not support suitable habitat (Appendix C, Table 2). These species are not discussed further. Three species, Cooper's hawk, burrowing owl, and California horned lark, were assessed as having moderate potential to occur on or adjacent to the project site, and are discussed below.

#### Cooper's Hawk

Cooper's hawk is designated as a California Species of Special Concern. This species occurs in riparian forests and woodlands throughout California, including urban forests.<sup>39</sup> It prefers patchy wooded areas, such as groves with edges with snags for perching. It nests in dense stands with moderate crown-depths, usually nests in second-growth conifer stands, or in deciduous riparian areas, usually near streams. Cooper's hawk prey on mid-sized birds such as jays, starlings, and doves, but they also

<sup>34</sup> California Department of Fish and Wildlife (CDFW). 2022. CNDDDB RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: <https://map.dfg.ca.gov/rarefind/view/RareFind.aspx>. Accessed July 21, 2022.

<sup>35</sup> California Department of Fish and Wildlife (CDFW). 2022. Biogeographic Information and Observation System (BIOS 5). Website: <https://map.dfg.ca.gov/bios/>. Accessed July 21, 2022.

<sup>36</sup> United States Fish and Wildlife Service (USFWS). 2022. Information for Planning and Consultation (IPaC). Website: <https://ecos.fws.gov/ipac/>. Accessed July 21, 2022.

<sup>37</sup> California Department of Fish and Wildlife (CDFW). 2022. CNDDDB RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: <https://map.dfg.ca.gov/rarefind/view/RareFind.aspx>. Accessed July 21, 2022.

<sup>38</sup> California Department of Fish and Wildlife (CDFW). 2022. Biogeographic Information and Observation System (BIOS 5). Website: <https://map.dfg.ca.gov/bios/>. Accessed July 21, 2022.

<sup>39</sup> Chiang, S.N., P.H. Bloom, A.M. Bartuszevige, and S.E. Thomas. 2012. Home range and habitat use of Cooper's Hawks in urban and natural areas. Online ([www.ucpress.edu/go/sab](http://www.ucpress.edu/go/sab)) in C.A. Lepczyk and P.S. Warren (editors). Urban bird ecology and conservation. Studies in Avian Biology (no. 45), University of California Press, Berkeley, CA.

consume small rodents. The species capture prey from cover or while flying quickly through dense vegetation, relying on surprise. There are one recent and two historical records between 5 and 10 miles from the project site.

Trees on and adjacent to the project site support suitable nesting habitat for Cooper's hawk, and the species may forage on and adjacent to the project site.

### **Burrowing Owl**

The burrowing owl is an owl in the family Strigidae. Burrowing owls occur in open, dry, annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. This species utilizes, modifies, and nests in burrows created by other species, most notably those of the California ground squirrel, but also those excavated by coyotes, desert kit foxes, desert tortoises, American badgers, and other burrowing mammals. Burrowing owl populations are threatened by habitat loss, pesticide use, and ground squirrel eradication programs, which limit suitable burrowing habitat. This species is considered a Species of Special Concern (SSC) by the CDFW and a Bird of Conservation Concern (BCC) by the USFWS. Take of this species is covered under the MSHCP under certain conditions; however, their nesting burrows are protected by the MBTA and Fish and Game Codes pertaining to native nesting avian species. There are three recent records within 5 miles of the project site and 11 recent and three historical records between 5 and 10 miles from the project site (Exhibit 6).<sup>40</sup>

The project site contains suitable habitat for burrowing owls in the undeveloped areas supporting wild oats and annual brome grasslands. There were California ground squirrel and valley pocket gopher burrows present within these areas, which may provide suitable burrowing habitat. There is a moderate potential for burrowing owls to occur on-site, but likely only as dispersing transients.

### **California Horned Lark**

California horned lark is designated as a California SSC. This species is a common to abundant year-round resident that inhabits a variety of open habitats, such as grasslands and other open habitats with low, sparse vegetation, and typically where trees and large shrubs are absent. California horned lark nest on the ground, building grass-lined nests in a cup-shaped depression on open ground. This species is very gregarious and often forms large flocks that forage and roost together after the breeding season. California horned lark eats insects, snails, and spiders during breeding season and grass and forb seeds and other plant matter outside of the breeding season. There is one recent record within 5 miles of the project site and three recent records between 5 and 10 miles from the project site (Exhibit 6).<sup>41</sup>

The wild oats and annual brome grasslands on and adjacent to the project site may provide suitable foraging and nesting habitat for this species.

<sup>40</sup> California Department of Fish and Wildlife (CDFW). 2022. Biogeographic Information and Observation System (BIOS 5). Website: <https://map.dfg.ca.gov/bios/>. Accessed July 21, 2022.

<sup>41</sup> California Department of Fish and Wildlife (CDFW). 2022. Biogeographic Information and Observation System (BIOS 5). Website: <https://map.dfg.ca.gov/bios/>. Accessed July 21, 2022.

### 5.3.2 - Nesting Birds

The project site contains numerous surfaces, structures, and vegetation that could provide suitable nesting habitat for bird species protected under the MBTA and the Fish and Game Code. These species include Cooper’s hawk, burrowing owl, California horned lark, and other native avian species. Construction activities could disturb nesting and breeding birds in trees and shrubs within and around the project site. Potential impacts on special-status and migratory birds that could result from construction and operation of the proposed project include destruction of eggs or occupied nests, mortality of young, and abandonment of nests with eggs or young birds prior to fledging.

### 5.4 - Potentially Jurisdictional Water and Wetlands

There are no waters or wetland features on the project site that would be considered potentially jurisdictional by USACE, nor any features that would be considered potentially jurisdictional by State regulatory agencies including the RWQCB and CDFW.



CNDDDB version 08/2022. Please Note:  
 The occurrences shown on this map represent the known locations of the species listed here as of the date of this version. There may be additional occurrences or additional species within this area which have not yet been surveyed and/or mapped. Lack of information in the CNDDDB about a species or an area can never be used as proof that no special status species occur in an area.

**Legend**

- Project Site
- 10-Mile Radius
- 5-Mile Radius

**Symbology**

- Plant (circular)
- Multiple (circular)
- Sensitive EO's (Commercial only)

Scientific Name  
*Nyctinomops femorosaccus*  
*Malacothamnus parishii*

Common Name  
 pocketed free-tailed bat  
 Parish's bush-mallow

*Charina umbratica*  
 southern rubber boa

*Lycium parishii*  
 Parish's desert-thorn

10-Mile Radius

5-Mile Radius

Scientific Name  
*Chloropyron maritimum ssp. maritimum*  
*Arenaria paludicola*

Common Name  
 salt marsh bird's-beak  
 marsh sandwort

*Rhaphitomidas terminatus abdominalis*  
 Delhi Sands flower-loving fly

The following species (not shown on map) are also known to occur within this 10-mile radius area:

Scientific Name	Common Name	Scientific Name	Common Name	Scientific Name	Common Name
<i>Accipiter cooperii</i>	Cooper's hawk	<i>Crotalus ruber</i>	red-diamond rattlesnake	<i>Neotoma lepida intermedia</i>	San Diego desert woodrat
<i>Agelaius tricolor</i>	tricolored blackbird	<i>Cuscuta obtusiflora var. glandulosa</i>	Peruvian dodder	<i>Nyctinomops femorosaccus</i>	pocketed free-tailed bat
<i>Alimophila ruficeps canescens</i>	southern California rufous-crowned sparrow	<i>Dipodomys merriami parvus</i>	San Bernardino kangaroo rat	<i>Oncorhynchus mykiss irideus pop. 10</i>	steelhead - southern California DPS
<i>Ambrosia pumila</i>	San Diego ambrosia	<i>Dipodomys stephensi</i>	Stephens' kangaroo rat	<i>Onychomys torridus ramona</i>	southern grasshopper mouse
<i>Anniella stebbinsi</i>	Southern California legless lizard	<i>Dodecathema leptoceras</i>	slender-horned spineflower	<i>Perognathus longimembris brevinasus</i>	Los Angeles pocket mouse
<i>Antrozous pallidus</i>	pallid bat	<i>Epidonax trailiili extimus</i>	southwestern willow flycatcher	<i>Phacelia stellaris</i>	Brand's star phacelia
<i>Arizona elegans occidentalis</i>	California glossy snake	<i>Eremophila alpestris actia</i>	California horned lark	<i>Phrynosoma blairvillii</i>	coast horned lizard
<i>Artemisiospiza belli belli</i>	Bell's sage sparrow	<i>Eriastrum densifolium ssp. sanctorum</i>	Santa Ana River woollystar	<i>Poliptilia californica californica</i>	coastal California gnatcatcher
<i>Aspidoscelis hyperythra</i>	orange-throated whiptail	<i>Eumops perotis californicus</i>	Busck's gallmoth	<i>Rhinichthys osculus ssp. 8</i>	Santa Ana speckled dace
<i>Aspidoscelis tigris stegneri</i>	coastal whiptail	<i>Euphydryas editha quino</i>	western mastiff bat	<i>Ribes divaricatum var. parishii</i>	Parish's gooseberry
<i>Astragalus hornii var. hornii</i>	Horn's milk-vech	<i>Falco columbarius</i>	quino checkerspot butterfly	<i>Riversidian Alluvial Fan Sage Scrub</i>	Riversidian Alluvial Fan Sage Scrub
<i>Athene cunicularia</i>	burrowing owl	<i>Galium californicum ssp. primum</i>	merlin	<i>Senecio aphanactis</i>	chaparral ragwort
<i>Berberis nevadensis</i>	Nevin's barberry	<i>Gila arcuati</i>	Alvin Meadow bedstraw	<i>Setophaga petechia</i>	yellow warbler
<i>Bombus crotchii</i>	Crotch bumble bee	<i>Helianthus nuttallii ssp. parishii</i>	arroyo chub	<i>Sidalcea neomexicana</i>	salt spring checkerbloom
<i>Buteo swainsoni</i>	Swainson's hawk	<i>Horkelia cuneata var. puberula</i>	Los Angeles sunflower	<i>Southern California Arroyo Chub/Santa Ana Sucker Stream</i>	Southern California Arroyo Chub/Santa Ana Sucker Stream
<i>Calochortus plummerae</i>	Plummer's mariposa-lily	<i>Icteria virens</i>	mesa horkelia	<i>Southern Cottonwood Willow Riparian Forest</i>	Southern Cottonwood Willow Riparian Forest
<i>Carex comosa</i>	bristly sedge	<i>Lanius ludovicianus</i>	yellow-breasted chat	<i>Southern Riparian Scrub</i>	Southern Riparian Scrub
<i>Catostomus santaanae</i>	Santa Ana sucker	<i>Lasthenia glabrata ssp. coulteri</i>	loggerhead shrike	<i>Southern Sycamore Alder Riparian Woodland</i>	Southern Sycamore Alder Riparian Woodland
<i>Centromadia pungens ssp. laevis</i>	smooth tarplant	<i>Lateralis jamaicensis coturniculus</i>	western yellow bat	<i>Spea hammondi</i>	western spadefoot
<i>Ceratochrysis longimata</i>	Desert cuckoo wasp	<i>Lepidum virginicum var. robinsonii</i>	Coulter's goldfields	<i>Sphenopholis obtusata</i>	prairie wedge grass
<i>Chaetodipus fallax fallax</i>	northwestern San Diego pocket mouse	<i>Lepus californicus bennettii</i>	California black rail	<i>Spinus lawrencei</i>	Lawrence's goldfinch
<i>Chorizanthe parryi var. parryi</i>	Parry's spineflower	<i>Monardella pringlei</i>	Robinson's pepper-grass	<i>Streptoccephalus woottoni</i>	Riverside fairy shrimp
<i>Cicindela tranquebarica viridissima</i>	greenest tiger beetle	<i>Nasturtium gambellii</i>	San Diego black-tailed jackrabbit	<i>Symphyotrichum defoliatum</i>	San Bernardino aster
<i>Coccyzus americanus occidentalis</i>	western yellow-billed cuckoo		Pringle's monardella	<i>Taxidea taxus</i>	American badger
<i>Coleonyx variegatus abbotti</i>	San Diego banded gecko		Gambel's water cress	<i>Vireo belli pusillus</i>	least Bell's vireo

Source: Bing Street Imagery. California Natural Diversity Database (CNDDDB), August 2022.



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**NOT FOR PUBLICATION**

Exhibit 6  
 CNDDDB Special-Status  
 Species Occurrences (10-mile radius)

DEDEAUX PROPERTIES, INC.  
 PALMYRITA AVENUE WAREHOUSE PROJECT  
 BIOLOGICAL RESOURCES ASSESSMENT AND WESTERN RIVERSIDE COUNTY  
 MULTIPLE SPECIES HABITAT CONSERVATION PLAN CONSISTENCY ANALYSIS



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## SECTION 6: MSHCP CONSISTENCY ANALYSIS

### 6.1 - Relationship to Criteria Cells, Cell Groups, and Conservation Areas

The project is located within the MSHCP plan area but is not “within or adjacent to” a Criteria Cell or Conservation Area. The nearest Criteria Cell Group (146) is located approximately 1.2 miles east of the project site (Exhibit 7). The nearest Conservation Areas include a Shinkle Conservation Easement (Public Quasi-Public Conserved Land) approximately 0.2 mile northeast of the project site, Citrus Business Park Conservation Easement (Public Quasi-Public Conserved Land) approximately 0.45 mile north of the project site, Box Spring Reserve (Public Quasi-Public Conserved Land) approximately 0.75 mile southeast of the project site, and Palmyrita Donation (RCA Conserved Land) approximately 1 mile southeast of the project site. This project area is not located within any Linkage. Because of its location outside of any Criteria Cells or Cell Groups, the project is not subject to Reserve Assembly Analysis requirements under the MSHCP. Because the project site is not within or adjacent to any MSHCP Conservation Areas, the project is not subject to Guidelines Pertaining to the Urban/Wildlands Interface or other requirements under the MSHCP pertaining to projects or actions implemented within or adjacent to a Conservation Area.

The project site is not located within an area slated for “Existing or Pending Conservation.” The project site does not feature “Avoidance Areas,” or areas that must be protected by, or proposed to be protected by, deed restriction. Current conditions and full development of the approximately 13.60-acre project site would not provide for any contributions to “Undeveloped Areas Potentially Available for Future Conservation.”

### 6.2 - Covered Roads

Two Covered Roads, Palmyrita Avenue, a Secondary Road, and Iowa Avenue, an Urban Arterial, are located along the southern and western borders of the project site and outside of the project development area. The project proposes three driveways that articulate with Palmyrita Avenue and Iowa Avenue; however, because the proposed project is located outside of any Criteria Area or Public/Quasi-Public Lands, the proposed project is not subject to Covered Road requirements under the MSHCP.

### 6.3 - Covered Public Access Activities

The project site is not located within an MSHCP Conservation Area and therefore, not subject to Covered Public Access Activities requirements under the MSHCP.

### 6.4 - Public Quasi-Public Lands

The project site is not located within or adjacent to any public or quasi-public lands, nor any area designated as Public/Quasi-Public Conserved Lands. The proposed project is not subject to MSHCP requirements covering Public Quasi-Public Lands.

## 6.5 - Covered Species Survey Area Requirements

The project site is located in the following covered species survey area:

- Burrowing Owl Survey Area

The proposed project is therefore subject to survey requirements for burrowing owl. Initially, the project site would be subject to a burrowing owl habitat assessment on and adjacent (within 500 feet) to the project site, per MSHCP protocol and per CDFW (2012) protocol.

The project area is not located in any of the following covered species survey areas:

- Amphibians Survey Area
- Mammals Survey Area
- Narrow Endemic Plants Survey Area
- Delhi Sands Flower-loving Fly Survey Area
- Criteria Area Species

Additionally, the project site is not located within any Additional Needs Survey Areas. The proposed project is therefore not subject to these survey requirements under the MSHCP.

## 6.6 - Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools

### 6.6.1 - Riparian Riverine Habitat

There is no Riparian Riverine Habitat on the project site or within 500 feet. The proposed project is therefore not subject to Riparian Riverine Requirements under the MSHCP.

### 6.6.2 - Riparian Birds

There is no Riparian Riverine Habitat on or adjacent to the project site and therefore no habitat for any riparian/riverine bird species, including least Bell's vireo (*Vireo bellii pusillus*), southwestern willow flycatcher (*Empidonax traillii extimus*), or western yellow-billed cuckoo (*Coccyzus americanus*). The proposed project is therefore not subject to riparian bird survey requirements.

### 6.6.3 - Vernal Pools

There are no vernal pools or features indicative of the historic presence of vernal pools on the project site or within 500 feet. According to the NRCS Web Soil Survey (2022), two soil types are mapped on the project site (Exhibit 4). Neither soil type on the project site are known to be soils utilized by fairy shrimp species known to occur in the Western Riverside County MSHCP Plan Area.<sup>42</sup> The proposed project is not subject to Vernal Pool or Vernal Pool Species requirements under the MSHCP.

<sup>42</sup> United States Fish and Wildlife Service (USFWS). 2005. Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon. Portland, Oregon. xxvi + 606 pages.



## 6.7 - Additional Survey Needs and Procedures

### 6.7.1 - Burrowing Owl

#### Analysis

The wild oats and annual brome grasslands in the western and eastern portions of the project site, as well as an adjacent area north of the western extent of the site, supports suitable foraging habitat for burrowing owl. There are small mammal burrows, including from California ground squirrels that could be used by burrowing owls. However, due to the heavy development surrounding the project site, this habitat is likely only valuable to transient burrowing owls that could use the site temporarily. For these reasons, there is a moderate potential for burrowing owl to occupy the project site. The CNDDDB shows 17 records of burrowing owls within 10 miles of the project site. This species is covered under the MSHCP and protected by the MBTA and Fish and Game Codes.

#### Potential Project Impacts

Construction of the proposed project could potentially impact burrowing owls if ground-disturbing construction activities are initiated or conducted during the burrowing owl nesting season (February 15 through August 31).

#### Proposed Mitigation

Mitigation for burrowing owls is presented in Section 7.

### 6.7.2 - Nesting Birds

#### Analysis

The project area supports vegetation communities, land cover types, and other habitat features that provide nesting habitat for avian species covered under the MBTA and Fish and Game Codes, including common, native species.

#### Potential Project Impacts

Construction of the proposed project could potentially impact nesting birds if ground-disturbing construction activities are initiated or conducted during the avian breeding season (February 15 through August 31).

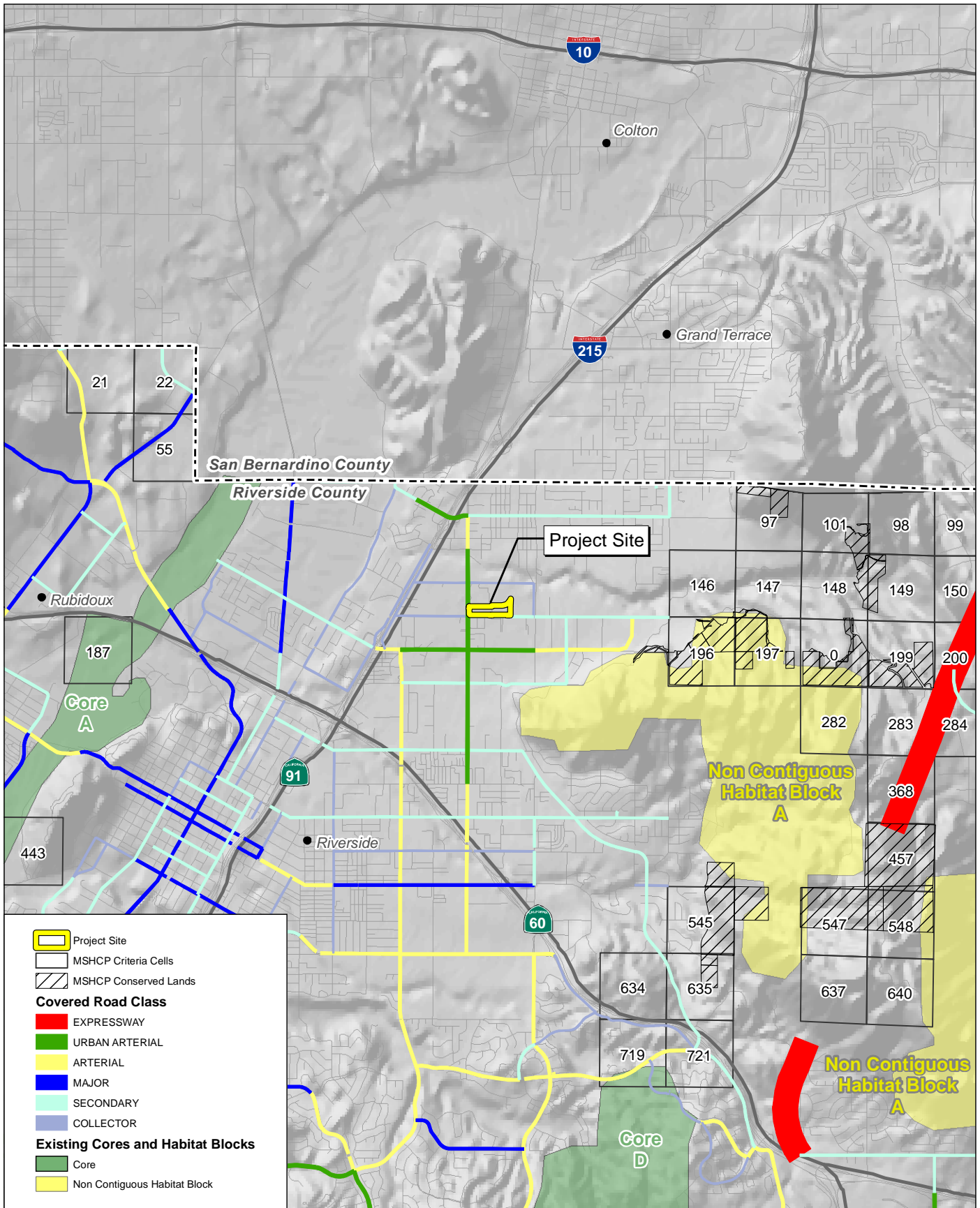
#### Proposed Mitigation

Mitigation for nesting birds is presented in Section 7.

## 6.8 - Best Management Practices

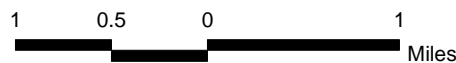
The project applicant shall implement Standard Best Management Practices (BMPs) of the MSHCP (Volume I, Appendix C). The BMPs are presented in Section 7.

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Source: USGS, Western Riverside County Regional Conservation Authority (RCA) MSHCP, Census 2000 data.

Exhibit 7



## MSHCP Conservation Areas in Relation to the Project Site

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## SECTION 7: IMPACT ANALYSIS AND RECOMMENDATIONS

The following discussion addresses potential project impacts on regulated biological resources, including special-status species, and recommends measures to avoid and/or mitigate impacts to a less than significant level under CEQA.

### 7.1 - Mitigation Measures

The following mitigation measures are required to reduce potential project-related impacts to less than significant levels. These mitigation measures clarify, expand upon, and are consistent with measures required under the MSHCP.

#### 7.1.1 - Burrowing Owls

The wild oats and annual brome grasslands in the western and eastern portions of the project site, as well as an adjacent area north of the western extent of the site, supports suitable foraging habitat for burrowing owl. There are small mammal burrows, including from California ground squirrels that could be used by burrowing owls. The CNDDDB shows 17 records of burrowing owls within 10 miles of the project site. This species is covered under the MSHCP and protected by the MBTA and Fish and Game Codes. Construction of the proposed project could potentially impact burrowing owls if ground-disturbing construction activities are initiated or conducted during the burrowing owl nesting season (February 15 through August 31).

##### **MM BIO-1a Burrowing Owl Pre-Construction Survey**

The project applicant shall retain a qualified Biologist to perform a pre-construction burrowing owl survey to determine whether burrowing owl are present on-site within 30 days prior to construction activities, according to the California Department of Fish and Wildlife (CDFW) guidelines and Multiple Species Habitat Conservation Plan (MSHCP) protocol. If construction is delayed or suspended for more than 30 days after the survey, the area shall be resurveyed. The pre-construction survey shall be completed on the project site and areas within 500 feet from the project boundary (where possible and appropriate based on habitat). All occupied burrows shall be mapped on an aerial photo. The applicant shall provide a burrowing owl survey report and mapping to the City at least 15 days prior to the expected start of any project-related ground disturbance activities, or restart of activities. If the survey is positive for burrowing owls, the project applicant shall implement MM BIO-1b. If no burrowing owls are detected during the pre-construction survey, no further action is necessary.

##### **MM BIO-1b Burrowing Owl Mitigation Plan**

If the pre-construction survey is positive for burrowing owl, the project proponent shall retain a qualified Biologist to develop and implement a Burrowing Owl Mitigation Plan. The Burrowing Owl Mitigation Plan shall contain the following

elements (as outlined in the California Department of Fish and Wildlife [CDFW] 2012 guidelines) at a minimum:

- Avoidance of burrowing owl during construction, including establishment of a 160-foot radius around occupied burrows during the nonbreeding season (September 1 through February 14) or a 300-foot radius around occupied burrows during the breeding season (February 15 through August 31), within which construction activities may not occur until a qualified Biologist has determined that (1) nonbreeding season owl have dispersed from the area; or (2) breeding season owl have fledged their juveniles from the occupied burrows and the juveniles are foraging independently and are capable of independent survival or have dispersed from the area.
- A plan for implementing a passive relocation program for nonbreeding owls, should it be needed. The passive relocation techniques should be consistent with CDFW guidelines, including installation of artificial burrows at an off-site location and use of one-way exclusion doors to ensure owls have left the burrow(s).

### 7.1.2 - Nesting Birds

The project site and adjacent lands support vegetation communities, land cover types, trees, and other habitat features that provide nesting habitat for avian species covered under the MBTA and Fish and Game Code, including common, native species. Construction of the proposed project could potentially impact nesting birds if ground-disturbing or vegetation-removing construction activities are initiated or conducted during the avian breeding season (February 15 through August 31).

The project applicant shall implement the following mitigation measures to avoid potential impacts to nesting birds protected under the Fish and Game Code or the MBTA, including Cooper's hawks, burrowing owls, and California horned larks. Implementation of the following measures would avoid and/or minimize potential effects to migratory birds and habitat in and adjacent to the project area. These measures shall be implemented for construction work during the nesting season (February 15 through August 31):

#### **MM BIO-2a Nesting Bird Pre-construction Surveys**

If ground-disturbing or vegetation-removing construction activities or tree removal is proposed during the breeding/nesting season for migratory birds (typically February 15 through August 31), a qualified Biologist shall conduct pre-construction surveys for special-status birds and other migratory birds within the construction area including a 300-foot survey buffer, no more than 3 days prior to the start of ground-disturbing activities in the construction area.

#### **MM BIO-2b Avoidance of Active Avian Nests**

If an active nest is located during pre-construction surveys or at any point during the construction phase of the project, the United States Fish and Wildlife Service (USFWS) and/or California Department of Fish and Wildlife (CDFW) (as appropriate)

shall be notified regarding the status of the nest. Furthermore, construction activities shall be restricted as necessary to avoid disturbance of the nest until it is abandoned or a qualified Biologist deems disturbance potential to be minimal. Restrictions may include establishment of exclusion zones (no ingress of personnel or equipment at a minimum radius of 300 feet around an active raptor nest and a 50-foot radius around an active migratory bird nest) or alteration of the construction schedule.

### 7.1.3 - Best Management Practices

#### MM BIO-3 Implement MSHCP Best Management Practices

Project personnel shall implement the following standard Multiple Species Habitat Conservation Plan (MSHCP) Best Management Practices (BMPs) during the construction phase of the proposed project:

1. A condition shall be placed on grading permits requiring a qualified Biologist to conduct Worker Environmental Awareness Program (WEAP) training for project personnel prior to grading. The training shall include a description of the species of concern and its habitats, the general provisions of the Endangered Species Act and the MSHCP, the need to adhere to the provisions of the Endangered Species Act and the MSHCP, the penalties associated with violating the provisions of the Endangered Species Act, the general measures that are being implemented to conserve the species of concern as they relate to the proposed project, and the access routes to and project site boundaries within which the proposed project activities must be accomplished.
2. The footprint of disturbance shall be minimized to the maximum extent feasible. Access to sites shall be via pre-existing access routes to the greatest extent possible.
3. The qualified project Biologist shall monitor construction activities for the duration of the proposed project to ensure that practicable measures are being employed to avoid incidental disturbance of habitat and species of concern outside the project footprint.
4. The removal of native vegetation shall be avoided and minimized to the maximum extent practicable. Temporary impacts shall be returned to pre-existing contours and revegetated with appropriate native species.
5. Exotic species that prey upon or displace target species of concern should be permanently removed from the site to the extent feasible.
6. To avoid attracting predators of the species of concern, the project site shall be kept as clean of debris as possible. All food related trash items shall be enclosed in sealed containers and regularly removed from the site(s).
7. Construction employees shall strictly limit their activities, vehicles, equipment, and construction materials to the proposed project footprint and designated staging areas and routes of travel. The construction area(s) shall be the minimal area necessary to complete the proposed project and shall be specified in the

construction plans. Construction limits will be fenced with orange snow screen. Exclusion fencing should be maintained until the completion of all construction activities. Employees shall be instructed that their activities are restricted to the construction areas.

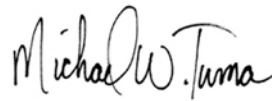
8. The City shall have the right to access and inspect the project site to determine its compliance with project approval conditions, including these BMPs.



## SECTION 8: CERTIFICATION

I hereby certify that the statements furnished above and in the attached exhibits present data and information required for this Biological Resources Assessment and MSHCP Consistency Analysis, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

Date: October 19, 2022 Signed:



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Michael W. Tuma, PhD, Senior Biologist  
FirstCarbon Solutions  
967 Kendall Drive, #A-537  
San Bernardino, CA 92407  
909.884.2255

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**Appendix A:  
Resumes**

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### OVERVIEW

- More than 26 years of experience
- Experience leading teams in large data collection and analysis efforts

### Education

- Doctor of Philosophy, Integrative and Evolutionary Biology, University of Southern California, Los Angeles, CA, 2016
- Master of Science, Anthropology, University of Southern Mississippi, Hattiesburg, MS, 1998
- Master of Science, Zoology, Eastern Illinois University, Charleston, IL, 1993
- Bachelor of Science, Zoology, Truman State University, Kirksville, MO, 1991

### Permits, Authorizations, and Certifications

- Certified Wildlife Biologist, The Wildlife Society, 2013–present
- Certified Significant Ecological Areas Technical Advisory Committee (SEATAC) Biota Report Preparer, Los Angeles County Department of Regional Planning, 2008–present
- Qualified Biologist, San Bernardino County, 2007–present
- Authorized Biological Consultant, Riverside County, 2006–present
- Authorized Biologist for Agassiz's desert tortoise activities under 10(a)1(A) Recovery Permits (former) and Biological Opinions, US Fish and Wildlife Service (USFWS), August 2005–present
- California Scientific Collecting Permit/California Endangered Species Act (ESA)-Memorandum of Understanding, California Department of Fish and Wildlife (CDFW), August 2005–present

### Trainings and Workshops

- ArcGIS Training Courses, Esri Academy, 2016–present
- Desert Tortoise Health Assessments for Translocation Projects, Desert Tortoise Council, 2015
- CEQA Workshop, Association of Environmental Professionals, 2008
- Endangered Species: Regulation, Conservation Planning, and Permits for Development, University of California, Los Angeles Extension, 2008
- Desert Tortoise Health Assessment and Phlebotomy Training, US Geographical Survey (USGS), 2007
- Endangered Species Permitting: Strategies and Successful Negotiations Workshop, The Wildlife Society, 2006
- A/E/C Project Management Bootcamp, PSMJ Resources, Inc., 2006
- Introduction to CEQA: A Step-by-Step Approach Workshop, SCWA, 2005
- Western Pond Turtle Workshop: Ecology and Conservation, The Wildlife Society, 2005
- Surveying, Monitoring, and Handling Techniques Workshop, Desert Tortoise Council, 2004

### Professional Affiliation

- Adjunct Professor, University of Southern California, March 2019–present
- Chair, Board of Directors, Desert Tortoise Council, February 2018–February 2020
- Chair, Media Committee, Desert Tortoise Council, June 2017–present
- Chair, Grants Committee, Desert Tortoise Council, January 2016–present
- Board of Directors Member, Desert Tortoise Council, January 2014–present
- Newsletter Editor, Desert Tortoise Council, January 2014–January 2018

## MICHAEL TUMA, PHD, CWB, RPA—SENIOR BIOLOGIST

**Michael Tuma, PhD, CWB, RPA**, has more than 26 years of experience as a professional scientist in academic settings, agency positions, and as an environment consultant. He assists clients in complying with laws such as the ESA, the National Historic Preservation Act, CEQA, and NEPA. He has experience in a wide variety of technical biological work, including rare plant surveys and botanical inventories, habitat restoration planning and implementation, field data collection, population and habitat modeling, and technical biological reporting. He is a proficient project and client manager with experience in a diversity of market sectors, including land management, renewable energy, transportation, water infrastructure, gas and mineral extraction, and land development. Dr. Tuma has led teams in the implementation of studies and documentation in support of permitting and compliance with numerous environmental laws, including the Federal Endangered Species Act, California Endangered Species Act, NEPA, CEQA, and Migratory Bird Treaty Act, among many others. Dr. Tuma is an experienced leader and has supervised and mentored groups of biologists. He has directed teams on large and long-term projects and mentored junior staff on issues pertaining to project management, technical studies and documentation, and regulatory processes. He has led and mentored large groups of volunteers and international biologists on learning advanced data collection techniques and has experience leading a non-profit organization with more than 350 members. Dr. Tuma is skilled in project management, statistics, geographic information systems (GIS), and computer modeling. He has a passion for educating the public about science, and has been providing tutoring sessions, workshops, and lectures for more than 20 years.

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## RELATED EXPERIENCE AND CLIENT SUMMARY

### *Biological, Archaeological, and Paleontological Monitoring and Reporting Services for the Los Angeles Regional Interoperable Communications System, Los Angeles County, CA*

FCS provided monitoring and reporting services during the construction of more than 150 land mobile radio (LMR) facilities at sites located primarily in Los Angeles County. The LMR sites contain the infrastructure and equipment necessary to provide voice communications coverage throughout the County for emergency responders. These locations are widely dispersed across the County in both urban (intensively developed) and rural (less developed) settings and include coastal locations, sites in downtown Los Angeles, remote mountain peaks across the County, and the northern high desert. FCS conducted the biological, archaeological, and paleontological pre-construction and construction monitoring and reporting services in accordance with the Construction Management Requirements outlined in the NEPA Environmental Assessment that FCS prepared for the project.

Dr. Tuma served as Biological Monitor for this project in 2020. His responsibilities included implementing mitigation measures and ensuring project compliance in support of the LA-RICS LMR System in Los Angeles County, California. Dr. Tuma monitored project for compliance for up to 33 mitigation measures, including performing clearance surveys for special status species, pre-construction nesting bird surveys, and several measures pertaining to California condor (*Gymnogyps californianus*) conservation, including condor hazing.

### Other Relevant FCS Projects

- Port of Los Angeles Industrial Project Bird's Nest Survey, City of Los Angeles, CA
- Alton Parkway Logistics Facility Project IS/MND and Technical Studies, City of Irvine, CA
- Quick N Clean Car Wash Project IS/MND and Technical Studies, City of Adelanto, CA
- Bridge Point Peer Review of EIR and Technical Reports, City of Rancho Cucamonga, CA



## MICHAEL TUMA, PHD, CWB, RPA—SENIOR BIOLOGIST

- Redlands Residential Project Biological and Cultural Due Diligence, City of Redlands, CA
- Lilac Avenue Warehouse Due Diligence Memoranda, City of Rialto, CA
- Barton Road Logistics Center Project EIR, Technical Studies, and Peer Review, City of Colton, CA
- Griswold Residential Project Constraints Analysis, Unincorporated Los Angeles County, CA

### Prior Work Experience

#### *Santa Susana Field Laboratory, Boeing (through contract with MWH Americas, Inc.), Ventura County, CA*

Dr. Tuma served as the Project Manager for this project between 2006 and 2008. Under one task he designed and conducted field investigations on the extent and size of Braunton's milk-vetch (*Astragalus brauntonii*) population within an area of a USFWS-proposed designated Critical Habitat. He led field efforts, which included conducting vegetation mapping, delineating the Braunton's milk-vetch population within the proposed area, estimating the population size with the use of randomized transects and quadrats, conducting a complete vascular plant inventory within the study area, and authoring a technical report detailing the results of the investigation, which were used by the client in commenting on the proposed area of designated Critical Habitat. Dr. Tuma performed other tasks under this project, including nesting bird surveys, pre-construction surveys for special status species, and a revegetation/mitigation effort for the California Rare Santa Susana tarplant.

#### *Environmental Generalist Services Task Order Contract, California Department of Transportation District 7, Los Angeles and Ventura Counties, CA*

Dr. Tuma served as a Senior Biologist for this two-year on-call environmental services contract with the California Department of Transportation (Caltrans) District 7 between 2014 and 2015. While serving in this capacity, contributed to two task orders in support of the State Route 138 NW project, which consists of protocol desert tortoise, burrowing owl, and rare plant surveys and an analysis of wildlife crossing and movements on State Route (SR) 138 between SR 14 and Interstate 5. Dr. Tuma led in the field surveys, planned field and desktop analyses, directed a group of biologists and GIS specialists, and served as primary author of the deliverables produced for these task orders.

#### *Dune Palms Road Crossing Replacement, Caltrans (through contract with Parsons Brinckerhoff), Riverside County, CA*

Dr. Tuma served as the Project Manager for this project in 2014 and 2015. He was responsible for coordinating natural resources studies and agency consultation in support of the preparation of a Caltrans Natural Environment Study (NES). Project tasks included a general biological survey, focused surveys for burrowing owl and rare plants, trapping efforts for Palm Springs round-tailed ground squirrel (*Spermophilus tereticaudus*) and Palm Springs pocket mouse, a jurisdictional waters/habitats determination, agency consultation, preparation of a Biological Assessment in support of Section 7 consultation, documentation of study results, and preparation of the NES.

#### *Desert Quartzite Solar Energy Project EIR/EIS and Biological Studies, First Solar, Inc., Riverside County, CA*

Dr. Tuma served as the Project Manager for this project in 2015 and 2016, and was responsible for client management, biological studies, technical report preparation, and CEQA/NEPA documentation for a large-scale development in east Riverside County, California. His specific duties included reviewing studies prepared by prior consultants, conducting updated field surveys (vegetation mapping, rare plant, and desert tortoise surveys) and technical studies, and preparing the EIR/EIS Biological Resources

**MICHAEL TUMA, PHD, CWB, RPA—SENIOR BIOLOGIST**

section and appendices (Invasive Weed Management Plan, Raven Management Plan, Desert Tortoise Translocation Plan, Desert Kit Fox and American Badger Management Plan, Rare Plant Management Plan, and Vegetation Restoration Plan).

*Edom Hills Wind Energy Facility, BP Wind Energy North America, Inc., Riverside County, CA*

Dr. Tuma served as the Project Manager and Lead Authorized Biologist for this project in 2016 and was responsible for conducting a habitat assessment, eolian dune characterization study, and biological monitoring of project activities in support of minimizing the potential for take of Coachella Valley fringe-toed lizard (*Uma inornata*) and Coachella Valley milk-vetch (*Astragalus lentiginosus var. coachellae*) during the installation of equipment in two project turbines. He coordinated with the BLM project Biologist to gain approval of biologists to monitor the work, and concurrence for the recommended mitigation measures, which included removing wind-blown sands from portions of the access road and placing the sand in adjacent areas where they could continue transport in the eolian ecosystem. He authored a post-construction memorandum that detailed the restoration of the eolian sand and avoidance of sensitive microhabitats where fringe-toed lizards typically hibernate during the project activities.

*High Desert Solar Project, Middle River Power (through contract with AECOM), San Bernardino County, CA*

Dr. Tuma served as the Lead Authorized Biologist for this project in 2020. He led the implementation of a desert tortoise translocation program in support of the High Desert Solar Project site in Victorville, San Bernardino County, California. The effort consists of performing protocol health assessments, collecting blood samples for disease testing, translocating tortoises from the development area to an off-site location in the Kramer Hills in the Fremont-Kramer Critical Habitat Unit, and monitoring them following translocation. Additional tasks included transplanting western Joshua trees from the project site, and monitoring of Environmentally Sensitive Areas established around active desert kit fox dens and burrowing owl burrows.

*Agassiz's Desert Tortoise Population Modeling and Conservation Planning for the Superior-Cronese and Gold Butte-Pakoon Critical Habitat Units, BLM, San Bernardino County, CA, Clark County, NV, and Mohave County, AZ*

As the Project Manager, Client Manager, and Principal Investigator of this project, Dr. Tuma conducted research into the population biology of Agassiz's desert tortoises on two study areas that comprise federal lands administered by the BLM between 2008 and 2013. He directed a team of more than 40 biologists, statisticians, and GIS specialists who contributed to the project; successfully developed spatially explicit, individual-based population models used to rank the importance of site-specific threats at each of the study areas; and served as the primary author of the technical report deliverables. This project consisted of collecting field data, compiling GIS data, conducting intensive literature reviews and expert interviews, and developing tortoise occurrence models, population models, and threats models for study areas that included the Superior-Cronese Critical Habitat Unit in San Bernardino County, California, and the Gold Butte-Pakoon Critical Habitat Unit in Clark County, Nevada, and Mohave County, Arizona. The modeling effort allowed Dr. Tuma to simulate the effects of site-specific threats on tortoise populations at each study area and develop land management and species conservation strategies that could be implemented by the BLM Field and State Offices on tortoise populations within each Critical Habitat Unit. He presented the research at the annual meetings of the Desert Tortoise Council, The Wildlife Society, and the World Congress of Herpetology, and published a manuscript in the Journal of Wildlife Management in early 2016.

**Appendix B:  
Site Photographs**

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Photo 1: Overview of parking area and existing warehouse in the south-central portion of the project site, facing west.



Photo 2: Overview of parking area in eastern portion of the project site, facing northeast.





Photo 3: Overview of the wild oats and annual brome grasslands in the eastern portion of the project site, facing north.



Photo 4: Overview of wild oats and annual brome grasslands in the western portion of the project site, facing west.



**Appendix C:  
Special-status Species Tables**

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**Table 1: Special-status Plant Species Potentially Occurring within the Project Site**

Scientific Name Common Name	Status			Habitat Description <sup>4</sup>	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS <sup>1</sup>	CDFW <sup>2</sup>	CNPS <sup>3</sup>			
<b>Dicots</b>						
<i>Ambrosia pumila</i> San Diego ambrosia	— MSHCP	—	1B.1	Perennial rhizomatous herb found in chaparral, coastal scrub, valley and foothill grassland, vernal pools at elevations between 20–415 m. Bloom period: April–October	<b>Low:</b> Marginal habitat for this species is present in the no-native grasslands on and adjacent to the project site, but the soils there have been subjected to repeated disturbances that would likely prevent its occurrence. There is one historical record between 5 and 10 miles from the project site.	No
<i>Arenaria paludicola</i> marsh sandwort	FE	SE	1B.1	Perennial stoloniferous herb found in marshes and swamps (freshwater or brackish) at elevations between 3–170 m. Bloom period: May–August	<b>None:</b> The project site does not contain suitable habitat to support this species due to the lack of wetlands present on-site. There is one historical record within 5 miles of the project site.	No
<i>Astragalus hornii</i> var. <i>hornii</i> Horn’s milk-vetch	—	—	1B.1	Occurs on salty flats, alkali sinks, lake shores, and riparian habitats. Blooming period: May–October Elevation: 60-300 m	<b>None:</b> The project site does not contain suitable habitat to support this species. There is one historical record between 5 and 10 miles from the project site.	No
<i>Berberis nevinii</i> Nevin’s barberry	FE MSHCP	SE	1B.1	Occurs on steep, north-facing slopes or in low grade sandy washes in chaparral, cismontane woodland, coastal sage and Riversidean alluvial fan sage scrub, and riparian scrub habitats. Blooming period: March–June Elevation: 290-1575 m	<b>None:</b> The project site does not contain suitable habitat to support this species. There is one historical record within 5 miles of the project site, and one recent and two historical records between 5 and 10 miles from the project site.	No
<i>Centromadia pungens</i> ssp. <i>laevis</i> smooth tarplant	— MSHCP	—	1B.1	Occurs in alkali meadow, alkali scrub, and disturbed places in valley and foothill grassland, chenopod scrub, meadows, playas, and riparian woodland habitats. Bloom period: April–September Elevation: 0–640 m	<b>None:</b> The project site does not contain suitable habitat to support this species. There is one historical record within 5 miles of the project site, and four recent and two historical records between 5 and 10 miles from the project site.	No

Scientific Name Common Name	Status			Habitat Description <sup>4</sup>	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS <sup>1</sup>	CDFW <sup>2</sup>	CNPS <sup>3</sup>			
<i>Chloropyron maritimum</i> ssp. <i>maritimum</i> salt marsh bird's-beak	FE	SE	1B.2	Dicot annual herb found in coastal dunes, marsh and swamp, salt marsh, and wetlands habitats. Limited to the higher zones of the salt marsh habitat at elevations between 0–30 m. Bloom period: May–October	<b>None:</b> The project site does not contain suitable habitat to support this species due to the lack of wetlands present on-site. There is one historical record within 5 miles of the project site.	No
<i>Chorizanthe parryi</i> var. <i>parryi</i> Parry's spineflower	— MSHCP	—	1B.1	Annual herb found in chaparral, coastal scrub, cismontane woodland, valley and foothill grassland at elevations between 275–1,220 m. Bloom period: April–June	<b>Low:</b> Marginal habitat is present within the non-native grasslands on and adjacent to the project site, but the soils there have been subjected to repeated disturbances that would likely prevent its occurrence. There are five historical records within 5 miles of the project site, and two historical records between 5 and 10 miles from the project site.	No
<i>Cuscuta obtusiflora</i> var. <i>glandulosa</i> Peruvian dodder	—	—	2B.2	Annual parasitic vine found in freshwater swamps and marshes at elevations between 15–280 m. Bloom period: July–October	<b>None:</b> The project site does not contain suitable habitat to support this species due to the lack of wetlands present on-site. There is one historical record within 5 miles of the project site.	No
<i>Dodecahema leptoceras</i> Slender-horned spineflower	FE MSHCP	SE	1B.1	Annual herb found in chaparral, coastal scrub and cismontane woodlands at elevations between 200–760 m. Bloom period: April–June	<b>None:</b> The project site does not contain suitable habitat to support this species due to the lack of chaparral or scrub vegetation. There is one historical record within 5 miles of the project site.	No
<i>Eriastrum densifolium</i> ssp. <i>sanctorum</i> Santa Ana River woolstar	FE MSHCP	SE	1B.1	Dicot perennial herb found in chaparral and coastal scrub habitat. Prefers sandy soils on river floodplains or terraced fluvial deposits at elevations between 180–700m. Bloom period: May–September	<b>None:</b> The project site does not contain suitable floodplain habitat to support this species. Nearest recorded occurrences are found adjacent to the Santa Ana River. There are seven recent records and one historical records within 5 miles of the project site, and five recent and three historical records between 5 and 10 miles from the project site.	No

Scientific Name Common Name	Status			Habitat Description <sup>4</sup>	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS <sup>1</sup>	CDFW <sup>2</sup>	CNPS <sup>3</sup>			
<i>Galium californicum</i> ssp. <i>primum</i> Alvin Meadow bedstraw	— MSHCP	—	1B.2	Perennial herb chaparral lower montane coniferous forest at elevations between 1350–1700 m. Bloom period: May–July	<b>None:</b> The project site does not contain suitable forested habitat to support this species. The project site is too low in elevation for species to occur. There is one historical record within 5 miles of the project site.	No
<i>Helianthus nuttallii</i> ssp. <i>parishii</i> Los Angeles sunflower	—	—	1A	Dicot perennial ( <i>rhizomatous</i> ) herb found in marshes and swamps, including coastal salt and freshwater at elevations between 10–1,675 m. Bloom period: August–October	<b>None:</b> The project site does not contain suitable habitat to support this species due to the lack of wetlands present on-site. There is one historical record within 5 miles of the project site.	No
<i>Horkelia cuneata</i> var. <i>puberula</i> mesa horkelia	—	—	1B.1	Perennial herb found in chaparral, coastal scrub and cismontane woodlands at elevations between 70–810 m. Bloom period: February–July	<b>None:</b> There is no suitable habitat present within the project site due to the frequent disturbance of the site and lack of chaparral or scrub vegetation. There are two historical records within 5 miles of the project site, and two historical records between 5 and 10 miles from the project site.	No
<i>Lasthenia glabrata</i> ssp. <i>coulteri</i> Coulter’s goldfields	— MSHCP	—	1B.1	Annual herb found in marshes and swamps, playas, and vernal pools. Elevation: 1-1220 m Bloom period: February-June	<b>None:</b> The project site does not contain suitable habitat to support this species due to the lack of marshes and swamps present on-site. There is one historical record between 5 and 10 miles from the project site.	No
<i>Lepidium virginicum</i> var. <i>robinsonii</i> Robinson’s pepper-grass	—	—	4.3	Dicot annual herb found in chaparral, coastal scrub. Prefers dry soils and shrubland at elevations between 1–855 m. Bloom period: January–July	<b>None:</b> The project site does not contain suitable habitat due to frequent disturbance of the site and lack of chaparral or scrub vegetation. There are one recent and five historical records within 5 miles of the project site, and two historical records between 5 and 10 miles from the project site.	No

Scientific Name Common Name	Status			Habitat Description <sup>4</sup>	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS <sup>1</sup>	CDFW <sup>2</sup>	CNPS <sup>3</sup>			
<i>Lycium parishii</i> Parish's desert-thorn	—	—	2B.3	Perennial shrub found in coastal scrub and Sonoran Desert scrub. Elevation: 135–1,000 m. Blooming period: March–April	<b>None:</b> The project site does not contain suitable habitat to support this species due to the lack of coastal scrub present on-site. There is one historical record between 5 and 10 miles from the project site.	No
<i>Malacothamnus parishii</i> Parish's bush-mallow	—	—	1A	Perennial deciduous shrub found in chaparral, coastal scrub at elevations between 305–455 m. Bloom period: June–July	<b>None:</b> The project site does not contain suitable habitat due to frequent disturbance of the site and lack of chaparral or scrub vegetation. There is one historical record within 5 miles of the project site.	No
<i>Monardella pringlei</i> Pringle's monardella	—	—	1A	Annual herb found in coastal scrub with sand soils at elevations between 300–400 m. Bloom period: May–June	<b>None:</b> The project site does not contain suitable habitat due to frequent disturbance of the site and lack of coastal scrub vegetation. There is one historical record within 5 miles of the project site, and one historical record between 5 and 10 miles from the project site.	No
<i>Phacelia stellaris</i> Brand's star phacelia	— MSHCP	—	1B.1	Annual herb found in coastal dunes and coastal scrub at elevations between 1–400 m. Bloom period: March–June	<b>None:</b> The project site does not contain suitable habitat due to frequent disturbance of the site and lack of coastal scrub vegetation. There is one historical record within 5 miles of the project site, and one historical record between 5 and 10 miles from the project site.	No
<i>Ribes divaricatum var. parishii</i> Parish's gooseberry	—	—	1A	Occurs in moist or riparian woodland habitat. Blooming period: February–April Elevation: 60-310 m	<b>None:</b> The project site does not contain suitable habitat to support this species. There is one historical record between 5 and 10 miles from the project site.	No
<i>Rorippa gambellii</i> Gambel's watercress	FE	ST	1B.1	Occurs in freshwater and brackish marshes and at the margins of lakes and along streams in or just above the water level. Blooming period: April–October Elevation: 5-330 m	<b>None:</b> The project site does not contain suitable habitat to support this species due to the lack of wetlands present on-site. There is one historical record between 5 and 10 miles from the project site.	No

Scientific Name Common Name	Status			Habitat Description <sup>4</sup>	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS <sup>1</sup>	CDFW <sup>2</sup>	CNPS <sup>3</sup>			
<i>Senecio aphanactis</i> chaparral ragwort	—	—	2B.2	Dicot annual herb found in chaparral, cismontane woodland, and coastal scrub habitat at elevations between 15–800m. Prefers drying alkaline flats. Bloom period: January–April	<b>None:</b> The project site does not have suitable habitat due to the frequent disturbance of the site and lack of chaparral or scrub vegetation or alkaline flats. There is one recent record and one historical record within 5 miles of the project site, and one historical record between 5 and 10 miles from the project site.	No
<i>Sidalcea neomexicana</i> salt spring checkerbloom	—	—	2B.2	Occurs in alkaline springs and marshes. Blooming period: March–June Elevation: < 1500 m	<b>None:</b> The project site does not contain suitable habitat to support this species due to the lack of springs and marshes present on-site. There is one historical record between 5 and 10 miles from the project site.	No
<i>Symphotrichum defoliatum</i> San Bernardino aster	—	—	1B.2	Perennial, rhizomatous herb found in banks of ditches, streams, and springs in cismontane woodlands, coastal scrub, lower montane coniferous forests, meadows and seeps, marshes and swamps, and vernal mesic valley and foothill grasslands. Elevation: 2–2,040 m. Bloom period: July–November	<b>None:</b> The project site does not contain suitable habitat to support this species. There are two historical records between 5 and 10 miles from the project site.	No
<b>Monocots</b>						
<i>Calochortus plummerae</i> Plummer’s mariposa-lily	— MSHCP	—	4.2	Occurs on rocky and sandy sites, usually of granitic alluvial material, in coastal sage and Riversidean alluvial fan sage scrub, chaparral, valley and foothill grassland, cismontane woodland, and lower montane coniferous forest habitats. Can be very common after fire. Bloom period: May–July Elevation: 100-1700 m	<b>None:</b> Suitable habitat for this species is not present on the project site, and the soils on the project site have been subjected to numerous disturbances that would prevent its occurrence. There are two recent records within 5 miles of the project site, and two recent records between 5 and 10 miles from the project site.	No



Scientific Name Common Name	Status			Habitat Description <sup>4</sup>	Potential to Occur and Rationale	Included in Impact Analysis
	USFWS <sup>1</sup>	CDFW <sup>2</sup>	CNPS <sup>3</sup>			
<i>Carex comosa</i> bristly sedge	—	—	2B.1	Perennial rhizomatous herb found in coastal prairie, marshes and swamps (lake margins), valley and foothill grasslands at elevations between 0–625 m. Bloom period: May–September	<b>None:</b> The project site does not contain suitable habitat to support this species due to the lack of wetlands or grasslands present on-site. There is one historical record within 5 miles of the project site.	No
<i>Sphenopholis obtusata</i> prairie wedge grass	—	—	2B.2	Perennial herb found in cismontane woodlands, meadows and seeps at elevations between 300–2,000 m. Bloom period: April–July	<b>None:</b> The project site does not contain suitable habitat due to the frequent disturbance of the site and lack of woodlands and meadows present on-site. There are two historical records within 5 miles of the project site.	No

**Code Designations**

<sup>1</sup> Federal Status: 2020 USFWS Listing	<sup>2</sup> State Status: 2020 CDFW Listing	<sup>3</sup> CNPS: 2020 CNPS Listing
<b>ESU</b> = Evolutionary Significant Unit is a distinctive population. <b>FE</b> = Listed as endangered under Federal Endangered Species Act (FESA). <b>FT</b> = Listed as threatened under FESA. <b>FC</b> = Candidate for listing (threatened or endangered) under FESA. <b>FD</b> = Delisted in accordance with FESA. <b>FPD</b> = Federally Proposed to be Delisted. <b>MBTA</b> = protected by the Migratory Bird Treaty Act — = Not federally listed	<b>SE</b> = Listed as endangered under California Endangered Species Act (CESA). <b>ST</b> = Listed as threatened under CESA. <b>SSC</b> = Species of Special Concern as identified by the CDFW. <b>FP</b> = Listed as fully protected under the Fish and Game Code. <b>CFG</b> = Fish and Game Code =protected by Fish and Game Code 3503.5 <b>CR</b> = Rare in California. — = Not State listed	<b>Rank 1A</b> = Plants species that presumed extinct in California. <b>Rank 1B</b> = Plant species that are rare, threatened, or endangered in California and elsewhere. <b>Rank 2</b> = Plant species that are rare, threatened, or endangered in California, but more common elsewhere. <b>Rank 3</b> = Plants about which we need more information—A Review List <b>Rank 4</b> = Plants of limited distribution—A Watch List <b>Blooming period:</b> Months in parentheses are uncommon.

<sup>3</sup> **Habitat description:** Habitat description adapted from CNDDB (CDFW 2022<sup>9</sup>) and CNPS online inventory (CNPS 2022<sup>9</sup>).

**Table 2: Special-status Wildlife Species Potentially Occurring within the Project**

Scientific Name Common Name	Status		Habitat Description <sup>3</sup>	Potential to Occur and Rationale <sup>4</sup>	Included in Impact Analysis
	USFWS <sup>1</sup>	CDFW <sup>2</sup>			
<b>Crustaceans</b>					
<i>Streptocephalus woottoni</i> Riverside fairy shrimp	FE MSHCP	—	Vernal pools on the Santa Rosa Plateau on Murrieta stony clay loams, Las Posas series, Wyman clay loam, and Willows soils.	<b>None.</b> Suitable habitat for this species is not present on or adjacent to the project site due to the lack of vernal pools. There are two historical records between 5 and 10 miles from the project site.	No
<b>Insects</b>					
<i>Bombus crotchii</i> Crotch bumble bee	—	CE	Occurs in grassland and scrubland habitats. Nests in abandoned rodent burrows.	<b>Low.</b> Marginal habitat for this species is present in the non-native grasslands on and adjacent to the project site. There are three recent (all from 2020) and three historical records within 5 miles of the project site, and two recent and one historical records between 5 and 10 miles from the project site.	No
<i>Ceratochrysis longimala</i> desert cuckoo wasp	—	—	Unknown habitat requirements, but prefer dry areas and sandy soils.	<b>None.</b> Suitable habitat for this species is not present on or adjacent to the project site. There is one historical record within 5 miles of the project site.	No
<i>Cicindela tranquebarica viridissima</i> greenest tiger beetle	—	—	Inhabits the woodlands adjacent to the Santa Ana River basin and usually is found in open spots between trees in riparian woodlands.	<b>None.</b> Suitable habitat for this species is not present on or adjacent to the project site. There is one historical record within 5 miles of the project site.	No
<i>Danaus plexippus</i> monarch butterfly	—	—	Occurs in temperate climates, such as eastern and western North America and undergoes long-distance migration. Lays eggs on obligate milkweed host plant (primarily <i>Asclepias</i> spp.)	<b>Low:</b> No milkweed is present on project site therefore species would only occur as a transient.	No

Scientific Name Common Name	Status		Habitat Description <sup>3</sup>	Potential to Occur and Rationale <sup>4</sup>	Included in Impact Analysis
	USFWS <sup>1</sup>	CDFW <sup>2</sup>			
<i>Eugnosta busckana</i> Busck's gallmoth	—	—	Unknown habitat requirements, but probably inhabits a variety of grassland and scrub habitats.	<b>None.</b> Suitable habitat for this species is not present on or adjacent to the project site. There is one historical record between 5 and 10 miles from the project site. This species is believed to be locally extirpated.	No
<i>Euphydryas editha quino</i> quino checkerspot butterfly	FE MSHCP	—	Occurs in grasslands, coastal sage scrub, chamise chaparral, red shank chaparral, juniper woodland, and semi-desert scrub habitats. Larval host plants are native species of plantain.	<b>None.</b> Suitable habitat for this species is not present on or adjacent to the project site. There are two historical records between 5 and 10 miles from the project site.	No
<i>Neolarra alba</i> white cuckoo bee	—	—	Unknown habitat requirements, but probably inhabits a variety of grassland and scrub habitats. Parasitizes nests of other bees.	<b>None.</b> Suitable habitat for this species is not present on or adjacent to the project site. There are three historical records between 5 and 10 miles from the project site.	No
<i>Rhaphiomidas terminatus abdominalis</i> Delhi Sands flower-loving fly	FE MSHCP	—	Occurs on fine sandy soils of the Delhi series (primarily Delhi fine sand), often on wholly or partly sand dunes stabilized by sparse native vegetation.	<b>None.</b> No suitable habitat is present within the project site due to lack of Delhi series soils and its associated vegetation communities. There are twenty-one recent and nine historical records within 5 miles of the project site, and six historical records between 5 and 10 miles from the project site.	No
<b>Fish</b>					
<i>Catostomus santaanae</i> Santa Ana sucker	FT MSHCP	—	Endemic to Los Angeles basin south coastal streams. Are habitat generalists, but prefer sand-rubble-boulder bottoms, cool, clear water, and algae.	<b>None.</b> Suitable habitat for this species is not present on or adjacent to the project site due to the lack of aquatic features. There are five recent records within 5 miles of the project site.	No
<i>Gila orcuttii</i> arroyo chub	— MSHCP	— SSC	Native to the streams and rivers of the Los Angeles plain in Southern California. Arroyo chub are adapted to survive in streams that fluctuate between large winter storm flows, and low summer flows, and the low dissolved oxygen and	<b>None.</b> Suitable habitat for this species is not present on or adjacent to the project site due to the lack of aquatic features. There are five historical records within 5 miles of the project site.	No

Scientific Name Common Name	Status		Habitat Description <sup>3</sup>	Potential to Occur and Rationale <sup>4</sup>	Included in Impact Analysis
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			wide temperature fluctuations. Feeds on plants such as algae and water fern, as well as insects and mollusks.		
<i>Oncorhynchus mykiss irideus</i> pop. 10 steelhead - southern California DPS	FE	—	Occurs in Pacific coast streams, including the Santa Ana River.	<b>None.</b> Suitable habitat for this species is not present on or adjacent to the project site due to the lack of aquatic features. There is one historical record within 5 miles of the project site.	No
<i>Rhinichthys osculus ssp. 8</i> Santa Ana speckled dace	—	— SSC	Occurs in small springs, streams, large rivers, and deep lakes, including headwaters of the Santa Ana and San Gabriel Rivers.	<b>None.</b> Suitable habitat for this species is not present on or adjacent to the project site due to the lack of aquatic features. There is one historical record between 5 and 10 miles from the project site.	No
<b>Amphibians</b>					
<i>Spea hammondi</i> western spadefoot	— MSHCP	— SSC	Occurs in open areas with sandy or gravelly soils in mixed woodlands, grasslands, coastal sage and Riversidean alluvial fan sage scrub, chaparral, sandy washes, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains. Breeds in ephemeral rain pools that do not contain bullfrogs, fish, or crayfish.	<b>None.</b> Suitable habitat for this species is not present on or adjacent to the project site. There are six recent and one historical records within 5 miles of the project site, and five recent and one historical records between 5 and 10 miles from the project site.	No
<b>Reptiles</b>					
<i>Anniella stebbinsi</i> southern California legless lizard	—	— SSC	Occurs in moist, loose soil in coastal sand dunes and a variety of interior habitats, including sandy washes and alluvial fans. Tolerant of disturbances.	<b>Low.</b> The project site contains marginally suitable annual grassland habitat; however, the high level of disturbance and presence of man-made barriers make this species unlikely to occur. The regular and recent disking of the project site likely make the area less suitable for occurrence of this species. There are nine recent and four historical records within 5	No

Scientific Name Common Name	Status		Habitat Description <sup>3</sup>	Potential to Occur and Rationale <sup>4</sup>	Included in Impact Analysis
	USFWS <sup>1</sup>	CDFW <sup>2</sup>			
				miles of the project site, and eleven recent and three historical records between 5 and 10 miles from the project site.	
<i>Arizona elegans occidentalis</i> California glossy snake	—	— SSC	Occurs in areas of rocky washes and loose, sandy soils and for burrowing in desert scrub grassland, coastal sage and Riversidean alluvial fan sage scrub, and chaparral habitats. Prefer open sandy areas with scattered brush, but also found in rocky areas.	<b>None.</b> Suitable habitat for this species is not present on or adjacent to the project site. There are five historical records within 5 miles of the project site, and one recent and three historical records between 5 and 10 miles from the project site.	No
<i>Aspidoscelis hyperythra</i> orange-throated whiptail	— MSHCP	— WL	Occurs primarily on coarse soils in open coastal sage and Riversidean alluvial fan sage scrub habitat.	<b>None.</b> Suitable habitat for this species is not present on or adjacent to the project site. There are three recent and six historical records within 5 miles of the project site, and three recent and eight historical records between 5 and 10 miles from the project site.	No
<i>Aspidoscelis tigris stejnegeri</i> San Diegan tiger whiptail	—	— SSC	Occurs in dry, open areas with sparse foliage in coastal sage and Riversidean alluvial fan sage scrub, chaparral, woodland, and riparian habitats.	<b>Low.</b> The project site contains marginally suitable annual grassland habitat; however, the high level of disturbance and presence of man-made barriers make this species unlikely to occur. There are one recent (from 2016) and one historical records within 5 miles of the project site, and three recent and two historical records between 5 and 10 miles from the project site.	No
<i>Charina umbratica</i> southern rubber boa	— MSHCP	FT	Occurs in rocks and logs or other debris in oak-conifer and mixed-conifer forests at elevations between 5,000 and 8,200 ft.	<b>None.</b> Suitable habitat for this species is not present on or adjacent to the project site. There are four recent and eight historical records between 5 and 10 miles from the project site.	No

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	USFWS <sup>1</sup>	CDFW <sup>2</sup>			
<i>Coleonyx variegatus abbotti</i> San Diego banded gecko	— MSHCP	— SSC	Prefers rocky areas in coastal sage and chaparral.	<b>None.</b> Suitable habitat for this species is not present on or adjacent to the project site. There is one recent record within 5 miles of the project site.	No
<i>Crotalus ruber</i> red-diamond rattlesnake	— MSHCP	— SSC	Occurs in arid, rocky areas in creosote scrub, coastal sage and Riversidean alluvial fan sage scrub, chaparral, oak and pine woodlands, grasslands, on cultivated areas.	<b>None.</b> Suitable habitat for this species is not present on or adjacent to the project site. There are five historical records within 5 miles of the project site, and one historical record between 5 and 10 miles from the project site.	No
<i>Phrynosoma blainvillii</i> coast horned lizard	— MSHCP	— SSC	Occurs in open areas with sandy soil and low vegetation in grasslands, coniferous forests, woodlands, and chaparral.	<b>None.</b> Suitable habitat for this species is not present on or adjacent to the project site. There are three historical records within 5 miles of the project site, and ten historical records between 5 and 10 miles from the project site.	No
<b>Birds</b>					
<i>Accipiter cooperii</i> Cooper's hawk	— MBTA MSHCP	— CFG WL	Occurs and nests in deciduous and mixed forests and open woodland habitats. Year-round resident in southern California, and tolerant of urban areas with an abundance of trees.	<b>Moderate.</b> Suitable nesting habitat for this species is present in the ornamental trees on and adjacent to the project site. There are one recent and two historical records between 5 and 10 miles from the project site, with the closest occurrence being over 6 miles from the site.	Yes
<i>Agelaius tricolor</i> tricolored blackbird	— MSHCP	FT SSC CFG	Occurs and nests in large freshwater marshes with dense stands of hydrophytic vegetation (cattails, bulrushes, etc.). Short-distance migrant.	<b>None.</b> Suitable habitat for this species is not present on or adjacent to the project site. There are two recent and one historical record within 5 miles of the project site.	No
<i>Aimophila ruficeps canescens</i>	— MSHCP	— CFG WL	Occurs and nests on steep, often rocky hillsides with grass and forb patches in coastal sage and Riversidean alluvial fan sage scrub and sparse	<b>None.</b> Suitable habitat for this species is not present on or adjacent to the project site. There are two recent records within 5 miles of the project site, and seven recent and two	No

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southern California rufous-crowned sparrow			mixed chaparral habitats. Year-round resident in southern California.	historical records between 5 and 10 miles from the project site.	
<i>Artemisiospiza belli belli</i> Bell's sage sparrow	— MBTA MSHCP	— WL	Breeds in coastal sagebrush, chaparral, and other open, scrubby habitats in Southern California mountains, deserts and valleys.	<b>None.</b> Suitable habitat for this species is not present on or adjacent to the project site. There is one recent record within 5 miles of the project site, and one recent and one historical records between 5 and 10 miles from the project site.	No
<i>Athene cunicularia</i> burrowing owl	— MSHCP	— SSC CFG	Occurs and nests in open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. A subterranean nester, dependent upon burrowing mammals, most notably the California ground squirrel. Short-distance migrant.	<b>Moderate.</b> Suitable burrowing and nesting habitat for this species is present in the form of California ground squirrel burrows within non-native grassland on the project site. Extensive development surrounding the project site and limited availability of habitat on and adjacent to the project site likely make the area less suitable for occurrence of this species; thus potential for occurrence would likely be transient burrowing owls using the site temporarily. There are three known records, from 2006 and 2007, within 5 miles of the project site, and eleven recent and three historical records between 5 and 10 miles from the project site.	Yes
<i>Buteo swainsoni</i> Swainson's hawk	— MBTA MSHCP	FT CFG	Occurs and nests in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations. Long-distance migrant.	<b>None.</b> Suitable habitat for this species is not present on or adjacent to the project site, and the species is believed to be locally extirpated. There are two historical records between 5 and 10 miles from the project site.	No



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<i>Coccyzus americanus occidentalis</i> western yellow-billed cuckoo	FT MSHCP	SE	Occurs and nests in riparian forest along the broad lower flood-bottoms of larger river systems. Found in riparian jungles of willow, often mixed with cottonwoods; understory consists of blackberry, nettles, and wild grape. Long-distance migrant.	<b>None.</b> Suitable habitat for this species is not present on or adjacent to the project site. There are one recent and two historical records within 5 miles of the project site, and one historical record between 5 and 10 miles from the project site.	No
<i>Empidonax traillii extimus</i> southwestern willow flycatcher	FE MSHCP	SE	Occurs and nests in dense riparian woodlands. Long-distance migrant.	<b>None.</b> Suitable habitat for this species is not present on or adjacent to the project site. There is one historical record between 5 and 10 miles from the project site.	No
<i>Eremophila alpestris actia</i> California horned lark	— MBTA MSHCP	— CFG WL	Occurs and nests in open areas with sparse vegetation. Year-round resident in southern California.	<b>Moderate.</b> Suitable habitat for this species is present in the non-native grasslands on and adjacent to the project site. There are three historical records between 5 and 10 miles from the project site.	Yes
<i>Falco columbarius</i> merlin	— MBTA MSHCP	— WL	Nests in Canada and Alaska in open and semi-open areas such as grasslands and open forests. Winters in southern California, where it typically forages in open habitats supporting natural vegetation communities.	<b>Low.</b> Suitable foraging habitat for this species is not present on or adjacent to the project site. This species may occur on the project site as a forager, and likely only as a transient. There is one recent record within 5 miles of the project site.	No
<i>Icteria virens</i> yellow-breasted chat	— MBTA MSHCP	— SSC CFG	Occurs and nests in riparian thickets of willow and other bushy tangles near watercourses. Long-distance migrant.	<b>None.</b> Suitable habitat for this species is not present on or adjacent to the project site. There are one recent and two historical records between 5 and 10 miles from the project site.	No
<i>Lanius ludovicianus</i> loggerhead shrike	— MBTA MSHCP	— SSC CFG	Occurs and nests in broken woodlands, savannah, pinyon-juniper, Joshua tree, and riparian woodlands, desert oases, scrub & washes. Prefers open country for hunting, with perches for scanning, and fairly dense shrubs and brush for nesting.	<b>None.</b> Suitable habitat for this species is not present on or adjacent to the project site. There are two historical records between 5 and 10 miles from the project site.	No

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<i>Laterallus jamaicensis coturniculus</i> California black rail	—	FT FP	Occurs and nests in freshwater marshes, wet meadows, and shallow margins of saltwater marshes bordering larger bays. Needs water depths of about 1 inch that do not fluctuate during the year and dense vegetation for nesting habitat.	<b>None.</b> Suitable habitat for this species is not present on or adjacent to the project site. There is one historical record within 5 miles of the project site, and one historical record between 5 and 10 miles from the project site.	No
<i>Polioptila californica californica</i> coastal California gnatcatcher	FT MSHCP	— SSC CFG	Occurs and nests in arid washes, on mesas, and slopes in coastal sage scrub below 2500 ft. Year-round resident in California.	<b>None.</b> Suitable habitat for this species is not present on or adjacent to the project site. There are seven historical records within 5 miles of the project site, and three recent and nine historical records between 5 and 10 miles from the project site.	No
<i>Setophaga petechia</i> yellow warbler	— MBTA MSHCP	— SSC CFG	Occurs and nests in willow shrubs and thickets, cottonwoods, sycamores, ash, and alders, predominantly in riparian habitats. Long-distance migrant.	<b>None.</b> Suitable habitat for this species is not present on or adjacent to the project site. There are one recent and one historical records between 5 and 10 miles from the project site.	No
<i>Spinus lawrencei</i> Lawrence's goldfinch	— MBTA	— CFG	Inhabits and nests in arid, open woodlands and oak trees in chaparral.	<b>None.</b> Suitable habitat for this species is not present on or adjacent to the project site. There are one recent and one historical records between 5 and 10 miles from the project site.	No
<i>Vireo bellii pusillus</i> least Bell's vireo	FE MSHCP	SE	Occurs and nests in low riparian habitat in the vicinity of water or in dry river bottoms. Long-distance migrant.	<b>None.</b> Suitable habitat for this species is not present on or adjacent to the project site. There are six recent and two historical records within 5 miles of the project site, and eighteen recent and one historical records between 5 and 10 miles from the project site.	No

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	USFWS <sup>1</sup>	CDFW <sup>2</sup>			
<b>Mammals</b>					
<i>Antrozous pallidus</i> pallid bat	—	— SSC	Occurs in deserts, grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures. Species is very sensitive to disturbance of roosting sites.	<b>None.</b> Suitable habitat for this species is not present on or adjacent to the project site. There is one historical record between 5 and 10 miles from the project site.	No
<i>Chaetodipus fallax</i> Northwestern San Diego pocket mouse	— MSHCP	— SSC	Occurs in sandy, herbaceous areas, usually in association with rocks or coarse gravel, in coastal sage and Riversidean alluvial fan sage scrub, chaparral, and grasslands.	<b>None.</b> Suitable habitat for this species is not present on or adjacent to the project site. There are one recent and two historical records within 5 miles of the project site, and six historical records between 5 and 10 miles from the project site.	No
<i>Dipodomys merriami parvus</i> San Bernardino kangaroo rat	FE MSHCP	CE SSC	Occurs on sandy loam substrates on first terraces and floodplains of washes in Riversidean alluvial fan sage scrub habitat.	<b>None.</b> Suitable habitat for this species is not present on or adjacent to the project site. The high level of disturbance, small area of available habitat, and presence of man-made barriers make this species unlikely to occur. There is one historical record within 5 miles of the project site, and eight recent and five historical records between 5 and 10 miles from the project site.	No
<i>Dipodomys stephensi</i> Stephens' kangaroo rat	FE MSHCP	FT	Occurs primarily in annual and perennial grasslands, but also occurs in coastal sage scrub with sparse canopy cover. Can burrow into firm soil.	<b>None.</b> Suitable habitat for this species is not present on or adjacent to the project site. There are nine historical records within 5 miles of the project site, and four recent and nineteen historical records between 5 and 10 miles from the project site.	No
<i>Eumops perotis californicus</i> western mastiff bat	—	— SSC	Occurs in many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, chaparral. Roosts in crevices in cliff faces, high buildings, trees, and tunnels.	<b>None.</b> Suitable habitat for this species is not present on or adjacent to the project site. There is one historical record within 5 miles of the project site, and three historical records between 5 and 10 miles from the project site.	No

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	USFWS <sup>1</sup>	CDFW <sup>2</sup>			
<i>Lasiurus xanthinus</i> western yellow bat	—	— SSC	Occurs in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats. Roosts in skirts of dead fronds in both native and non-native palm trees.	<b>None.</b> Suitable habitat for this species is not present on or adjacent to the project site. There is one historical record within 5 miles of the project site, and seven historical records between 5 and 10 miles from the project site.	No
<i>Lepus californicus bennettii</i> San Diego black-tailed jackrabbit	— MSHCP	— SSC	Occurs primarily in arid regions with short grass including open grasslands, agricultural fields, and sparse coastal scrub. Nests under bushes or shrubs that have shallow depressions.	<b>None.</b> Suitable habitat for this species is not present on or adjacent to the project site. The high level of disturbance, small area of available habitat, and presence of man-made barriers make this species unlikely to occur. There is one historical record within 5 miles of the project site, and eight recent and three historical records between 5 and 10 miles from the project site.	No
<i>Neotoma lepida intermedia</i> San Diego desert woodrat	— MSHCP	— SSC	Occurs in rock outcrops, rocky cliffs, and slopes in coastal sage and Riversidean alluvial fan sage scrub with moderate to dense canopies.	<b>None.</b> Suitable habitat for this species is not present on or adjacent to the project site. There is one historical record between 5 and 10 miles from the project site.	No
<i>Nyctinomops femorosaccus</i> pocketed free-tailed bat	—	— SSC	Occurs in pine-juniper woodlands, desert scrub, palm oasis, desert wash, and desert riparian habitats. Roosts in caves, crevices, mines, tunnels, and man-made structures.	<b>None.</b> Suitable habitat for this species is not present on or adjacent to the project site. There is one historical record within 5 miles of the project site, and two historical records between 5 and 10 miles from the project site.	No
<i>Onychomys torridus ramona</i> southern grasshopper mouse	—	— SSC	Occurs in desert areas, especially scrub habitats with friable soils for digging. Prefers low to moderate shrub cover.	<b>None.</b> Suitable habitat for this species is not present on or adjacent to the project site. There is one historical record within 5 miles of the project site, and one historical record between 5 and 10 miles from the project site.	No
<i>Perognathus longimembris brevinasus</i>	— MSHCP	— SSC	Occurs in open areas with fine, sandy soils in lower elevation grasslands and coastal sage and Riversidean alluvial fan sage scrub habitats.	<b>None.</b> Suitable habitat for this species is not present on or adjacent to the project site. There are three historical records within 5 miles of the project site, and four recent and	No

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	USFWS <sup>1</sup>	CDFW <sup>2</sup>			
Los Angeles pocket mouse				four historical records between 5 and 10 miles from the project site.	
<i>Taxidea taxus</i> American badger	—	— SSC	Occurs in drier open stages of most shrub, forest, and herbaceous habitats with friable soils. Requires sufficient food sources (rodents), friable soils, and open, uncultivated ground. Digs large burrows.	<b>None.</b> Suitable habitat for this species is not present on or adjacent to the project site. There is one historical record within 5 miles of the project site, and one historical record between 5 and 10 miles from the project site.	No
<b>Code Designations</b>					
<b><sup>1</sup> Federal Status: 2020 USFWS Listing</b>			<b><sup>2</sup> State Status: 2020 CDFW Listing</b>		
<b>ESU</b> = Evolutionary Significant Unit is a distinctive population. <b>FE</b> = Listed as endangered under the FESA. <b>FT</b> = Listed as threatened under the FESA. <b>FC</b> = Candidate for listing (threatened or endangered) under FESA. <b>FD</b> = Delisted in accordance with the FESA. <b>FPD</b> = Federally Proposed to be Delisted. <b>MBTA</b> = protected by the Migratory Bird Treaty Act — = Not federally listed			<b>SE</b> = Listed as endangered under the CESA. <b>ST</b> = Listed as threatened under the CESA. <b>SSC</b> = Species of Special Concern as identified by the CDFW. <b>FP</b> = Listed as fully protected under FGC. <b>CFG</b> = FGC =protected by FGC 3503.5 <b>CE</b> = Candidate endangered under the CESA. <b>WL</b> = CDFW Watch List — = Not state listed		
Notes: <sup>3</sup> Habitat Description: Habitat description adapted from CNDDDB or other specified source <sup>4</sup> Potential to Occur and Rationale: Location of recorded species occurrences determined by geospatial information from BIOS 5 or other specified source. Sources: California Department of Fish and Wildlife (CDFW). 2022. Biogeographic Information and Observation System (BIOS 5). Website: <a href="https://map.dfg.ca.gov/bios/">https://map.dfg.ca.gov/bios/</a> . Accessed July 21, 2022. California Department of Fish and Wildlife (CDFW). 2022. CNDDDB RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: <a href="https://map.dfg.ca.gov/rarefind/view/RareFind.aspx">https://map.dfg.ca.gov/rarefind/view/RareFind.aspx</a> . Accessed July 21, 2022. United States Fish and Wildlife Service (USFWS). 2022. Information for Planning and Consultation. Website: <a href="https://ecos.fws.gov/ipac/">https://ecos.fws.gov/ipac/</a> . Accessed July 21, 2022.					

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